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ABSTRACT

This annotated bibliography cites materials dealing with the issue of quality of life as an orientation to population education. Sixty-four percent of the 63 publications cited deal with Asia and the Pacific while the rest are from other regions of the world. The time span of the publications is 1971-1980. Since quality of life encompasses every part of living, the publications are organized into ten comprehensive classifications. They are: defining and measuring quality of life; general; food production; health and nutrition; education; environment and resources; migration, urbanization, human settlements, and housing; labour, manpower, employment; values, religion, ethics, psychological factors, and laws; and population education curriculum and instructional materials. The source of each publication is provided. (Author/RM)

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Quality of life: An Orientation to Population Education

Abstract - Bibliography
Series 2

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TABLE OF CONTENTS

Preface iii

Introduction 1

Section 1 : Defining and measuring quality of life (QOL) 8
- Quantitative approaches to quality of life 8
- Variables in measuring QOL 9
- Minimum standards 10
- Physical plus spiritual needs 10

Section 2 : General 12
- Encouraging the simple life 12
- Providing basic human needs 13
- China: Controlling population growth 14
- Malaysia: QOL of minorities 15
- Population education and QOL 16
- QOL among Malaysian children 17
- Integrating population factors with nutrition 18
- How population can affect QOL 19
- Self-reliance in improving quality of life 20

Section 3 : Food production 22
- Balancing food supply and population growth in Bangladesh .. 22
- Population increases with food production 22
- Alternative models for solving food problems 23
- Impacts of the world food situation 24

Section 4 : Health and nutrition 26
- Nutrition and children-bearing 26
- The importance of nutrition 27
- Health services for settlement areas 28
- Fertility and health 29

Section 5 : Education 31
- Population and quality of education 31
- Declining fertility aids goal attainment 31
- New policies to match lower growth rate 32
- Education results in smaller families 33
- Savings from educational expenditures 34

TABLE OF CONTENTS *(cont'd)*

Section 6 : Environment and resources 35

- Limiting births and individual consumption 35
- Population growth: environmental decline 35
- Development vs. the environment 36
- Water — an essential requirement for agriculture, fisheries and industry 37

Section 7 : Migration, urbanization, human settlements and housing 39

- Building livable localities 39
- Urban migrants in three capitals 40
- Migrants' adjustment to cities 41
- What's happening to cities? 42
- Stockholm: the human environment 43

Section 8 : Labour, manpower, employment 45

- Population growth and employment 45
- Employment and population planning 46
- Population and manpower planning 47

Section 9 : Values, religion, ethics, psychological factors, laws 48

- Clothing and self-image 48
- Why people want children 49
- Ethics and population 50
- Islam and family planning 50
- Sri Lanka: Law and living 51
- Stress from population growth 52
- Making decisions about population 53
- Attitudes and values regarding fertility 54
- People and values 55
- How many people can we have 56
- Self-control in population 58
- Population and social justice 59
- Thailand: Preferred sex in children 60

Section 10 : Population education curriculum and instructional materials 61

- Home economics and population 61
- Bangladesh: Curriculum for population education 62
- Indian workbook emphasizes quality of life 62
- Population growth and quality of life 63
- Republic of Korea: Learning units 64
- Malaysia: Self-learning in population education 66
- Population education in Pakistan 67
- Papua New Guinea handbook 68
- Philippines: Population growth 69
- How people use resources in Sri Lanka 69
- Life experiences: Thailand 70
- Curriculum materials for the region 70

PREFACE

This issue is the second in a series of abstract bibliographies dealing with various concrete issues and problems raised by population education workers in the course of undertaking population education programmes. Transmitting information is one of the many ways by which population education specialists deal with their needs and this series is intended to provide them with a means for knowing what information is available and where it can be found. More than this however, this abstract-bibliography presents summaries of major issues, arguments, results and conclusions of all the publications included in the series. The aim is to condense the original publication in such detail that it can if need be replace the original (as it is often difficult for the readers to acquire the original publication).

Secondly, the materials have been selected and organized in such a way that relevant and related materials are grouped together and analysed to show alternative solutions to a problem or sub-problems. The materials are first classified according to the various aspects or subjects surrounding a problem or an issue. Under each classification, the entries are arranged alphabetically by author, institution or other main entry within each classification. The general format includes a list of descriptors which are derived from the IBE and the Carolina Population Center Thesauri and the addresses of the sources of the materials.

This second series is devoted to the issue of quality of life as an orientation to population education or as the main concern of other development programmes. There are 63 publications selected and abstracted for this series with 64 per cent related to Asia and the Pacific while the rest are from other regions of the world. The time-span of publications is 1971-1980. Since 'quality of life' encompasses every part of living, the publications have been grouped into ten comprehensive classifications that include the topics of food, health and nutrition, education, environment, housing, employment, values and ethics, and others.

Acknowledgment is due to Professor J.E. Jayasuriya, former Unesco Regional Population Education Adviser, for preparing this series and writing an analytical synthesis of all the publications reviewed and abstracted.

INTRODUCTION

As is to be expected in connection with a newly developing field of study, the conceptualization of population education has been in a gradual state of evolution. Starting with a conceptualization that regarded population as a problem, and population education as an important response on the part of the educational system to it, population educators have now veered towards regarding quality of life as their primary focus to concern. They identify population as a pervasive factor affecting quality of life in its many facets and therefore needing explicit attention through a field of study designated as population education. This approach is characterized by the recognition that while population affects quality of life in an all-pervading manner, there are many other factors.

The documents selected for this second series of abstract-bibliographies deal with quality of life-population interrelationships and contain material of interest to population educators both for sharpening their own insights into these interrelationships and for selecting from them concepts that could, with advantage, be introduced into curricula. A few of the documents belong, in fact, to the category of curriculum/instructional materials. Others include books, reports, articles, journals.

The abstracts have been divided into ten sections as shown below, and they indicate the scope of the coverage. It should be noted, however, that they do not represent 'water-tight' compartments, and that there is a certain amount of overlap.

Section 1: Defining and measuring quality of life

Section 2: General

Section 3: Food

Section 4: Health and nutrition

Section 5: Education

Section 6: Environment and resources

Section 7: Migration, urbanization, human settlements, housing

Section 8: Labour, manpower, employment

Section 9: Values, religion, ethics, psychological factors, laws

Section 10: Curriculum and instruction materials.

Section 1: Defining and measuring quality of life

Four selections are abstracted in this section. They bring out the fact that although no two individuals have identical views as to what constitutes quality of life, there is a consensus regarding the significance of the concept, the need to determine its broad parameters, and possibly to make an attempt at measuring those which are quantifiable.

It is emphasized that quality of life encompasses not only the generally perceived basic needs for food, health, housing, education, and employment, but also those less tangible such as psychological, aesthetic and spiritual needs. Quality of life may be

viewed also from the perspective of the nation as a whole and in its various developmental stages, or from the perspectives of different population groups such as youth, women and minorities.

One of the selections describes an attempt at quantification and the difficulties involved. Nevertheless, measurements could indicate to decision-makers the directions in which ameliorative action should be taken. This rationale underlies the attempt in the selection from Malaysia to measure socio-economic health, using 24 indicators. Socio-economic health includes much in common with quality of life.

One of the selections stresses that, rather than developing indicators representative of all levels of quality of life, it would be better to focus on quality of life minima, as these would provide a basis for action programmes to meet the needs of the most disadvantaged.

Section 2: General

This section has been given the heading "general", since the selections do not focus on any one theme as in sections 3 to 9, but by and large encompass more than one theme, or relate to development as a whole. Another distinguishing characteristic of some of the selections is that they consider a chain of relationships rather than the relationship between population and one other variable.

Some of the selections point to the adoption of small-family norms and slowing down of population growth as the only solutions to current problems and the means of improving quality of life. Others suggest a variety of solutions of which the adoption of small-family norms is only one. Among those proposed are local initiative, self-reliance, modest consumption patterns and life styles that pose no threat to the environment, the achievement of greater productivity, and multi-sectoral approaches resulting in integrated programmes.

Reference has already been made in the preceding section to the usefulness of assessing quality of life in different population groups. One of the selections included in the section makes such a study for two population groups in Malaysia.

Section 3: Food production

Two of the three selections deal with the problems associated with food production in general terms. The third deals specifically with Bangladesh, but what is stated in it is equally applicable to most Third World countries. All the selections emphasize the interlocking nature of population growth and food production. Solutions to the food problem are seen to lie in the direction of producing more food, allocating food more equitably, and slowing down population growth. The necessity to increase food supply and to strive for greater productivity places the ecological environment under severe stress. The importance of taking every precaution to avoid continuing to degrade the ecological environment or disturbing its balance is emphasized. The article on Bangladesh, while reiterating the above points from its own perspective, additionally advocates justly the importance of turning food production towards high protein varieties, and secondly the need to develop an infra-structure of transport facilities so that when occasion arises food supplies may be moved from surplus areas to deficit areas.

Section 4: Health and nutrition

Four of the selections bear directly on health and nutrition. In them, nutrition receives almost consistent attention. The nutrition of the pregnant mother is considered from the point of view of its effects on the child in the womb. After birth, the nutritional status of the infant depends on whether it is breastfed, and in this regard, too, the nutritional and health status of the mother is important. Good nutrition in the childhood years is also emphasized for the harmonious development of children. The case for adequate nutrition through all these stages is supported by research dealing with the effects of malnutrition on the various aspects of a child's development. Parity and spacing between pregnancies are other issues dealt with from the point of view of maternal and child health, including nutritional status. Given a certain economic level, a small family rather than large one is conducive to better nutrition and health for mothers and children. Courses of action that are open to planners for improving nutritional levels of low-income families are outlined. Attention is also paid to the effects of improved health upon reproductive behaviour. It is recognized that improved health could increase fertility by reducing or eliminating diseases that impair fertility. At the same time, reductions in infant and child mortality are seen to be associated on a substantial scale with reduced birth rates. The present methods of delivering health services come under scrutiny, and it is pointed out that disadvantaged population groups such as the rural population and urban migrants do not receive a fair share of attention. The solution seems to lie in a determined effort to provide an integrated programme of maternal and child health services, including family planning, that really reaches the disadvantaged population groups.

Section 5: Education

There are five selections in this section. Three of them deal with the Republic of Korea, the Philippines, and Pakistan respectively, while one deals with Thailand, Sri Lanka, and Singapore. These four studies deal with the impact of population growth on educational development. The fifth study, based on research carried out in India, is concerned with the inverse relationship, namely the influence of education to fertility.

The studies relating to the Republic of Korea, the Philippines, Pakistan, Thailand and Sri Lanka all points more or less to the same set of conclusions, namely that a slowing down of the rate of population growth would enable educational goals to be achieved quicker and at less cost than would be the case if the rate did not come down. Moreover, the timing and pacing of the fertility decline are also important. A more rapid decline commencing immediately would facilitate the achievement of educational goals quicker and at the lower cost than a decline which commences later and proceeds at a more leisurely pace.

The term 'educational goals' includes both quantitative targets and qualitative improvements, and when financial resources have been strained to the full in the attempt to reach quantitative targets, quality improvements have not received much attention. The provision of educational facilities for disadvantaged population groups, such as the rural folk, women and urban migrants, has also tended to be neglected. In contrast to these five countries, Singapore, in which the fertility de-

cline began in 1957, has experienced substantially reduced educational expenditures, and diverted a fair amount of its educational expenditure to the achievement of qualitative improvements.

The selection from India summarizes research evidence which leads, *inter alia*, to the conclusion that the more educated the people, the more prone they are to accept small-family norms. Family planning education was found to increase the acceptance and use of contraceptives. It would seem reasonable to conclude that programmes of population education would also contribute towards the acceptance of small-family norms.

Section 6: Environment and resources

This section contains four selections, all of which focus on the impact of population growth on environment and resources. Additionally, one of them points out that the pattern of life of the population has also to be taken into account in assessing the impact of population growth on environment and resources.

Among resources, four that receive attention are water, land (crop-lands, grasslands and forests), energy sources, and fisheries. Over-utilization and over-exploitation of these resources have their hazards for the present and the future. There is great danger also of pollution of the environment on an increasing scale, with consequent degradation of the environment and a disturbance of the environmental balance. Increases in productivity, needed to meet the requirements of growing populations, compound problems relating to the environment and to resources. One of the measures that has to be taken in hand is to reduce the rate of population growth so as to diminish the rate of resource depletion and environmental degradation. A second important measure is to change present-day life styles that place severe strains on the environment and resources, and to adopt life styles that are more modest in their demands and in accordance with the ideal of conserving the environment and resources. A third important measure is to arrest the rural-urban drift, as many of the environmental problems in urban areas are accentuated by the rapidly mounting migration from rural areas.

Section 7: Migration, urbanization, human settlements, housing

Two of the five selections included in this section deal with the issues and problems involved in migration, urbanization, human settlements, and housing in a general way, while the three remaining selections are more specific, being based on case studies.

Rapid population growth has greatly reduced the opportunities for employment in rural areas, and the prospect of bettering their economic condition in driving rural youth and adults to the cities. Urbanization is increasing faster than the capacity of the industrial base in the cities to provide employment to more than a fraction of the migrant influx. The rush to the cities has caused a severe shortage of housing, and slums have come up on an unprecedented scale. The pressure on public utilities such as water, sewage, and transportation has placed these services under great stress.

The selections emphasize the need for human settlements planning. Investment, both by the public sector and the private sector, should be encouraged to develop rural areas and make them more attractive,

from the employment point of view and in other respects so as to discourage migration to cities. Agriculture should be made productive, and small-scale industries encouraged by means of loans on easy terms and other facilities.

While satellite towns in which new industries are established could prevent the rush to the major cities, such towns must be carefully planned so that they do not replicate the problems of the large cities. The development of satellite towns is essentially a long term process, and no quick solution to the problem of urban migration can be expected through them.

Every effort must be taken to identify the needs of migrants already in the cities and to take measures to alleviate the hardships they face. They need to be assisted to undertake low cost housing, participate in programmes of vocational training to develop the skills that are in demand in the cities. Self-employment should also be encouraged by means of programmes providing temporary financial accommodation. Social adjustment should also be promoted by encouraging migrants to form neighbourhood groups, and develop a sense of community that would be beneficial to them.

The importance of reducing family size and slowing population growth is emphasized as a means of improving the quality of life in human settlements in both urban and rural areas.

Section 8: Labour, manpower, employment

All three selections in this section focus on the interrelationships between population and employment. The rapid rate of population growth in many of the developing countries is responsible for a large influx of entrants annually into the labour force. Most of them seek employment in the modern sector, but the expansion of jobs in the modern sector is not fast enough to accommodate them. The impact of unemployment is felt most of all in the urban areas, as large numbers from rural areas migrante into them. The selections emphasize that this problem has to be attacked on several fronts. There should be a slowing down of population growth, but it should be remembered that its impact on labour force entrants would not be felt for about fifteen years. Urban-rural differentials in wages should be reduced in order to make rural employment reasonably attractive, and to discourage migration.

Policies of industrialization should be undertaken with due regard to employment creation, and the emphasis should be on the use of technologies that are more labour intensive than capital intensive. Investment in agriculture should receive a high priority as it might yield better results in terms of both output growth and employment growth.

Special attention should be paid to the creation of employment opportunities for women, both for their possible contribution to the growth of output and for the fertility inhibiting characteristic of female employment. The selections also emphasize the need for country-specific research on the interrelationships between population and employment policies.

Section 9: Values, religion, ethics, psychological factors, laws

The selections included in this section relate to values, and psychological or psycho-social factors in one way or another. Values are of fundamental impor-

tance to population education in a number of ways. It is one of the concerns of population education to promote an interest in quality of life, and make individuals take responsibility for improving quality of life for themselves and for others. This implies that quality of life must become a consciously accepted value. Occasions arise when decisions to be taken may require choices among values. For example, children are a much desired value, but regard for quality of life may point in the direction of limiting the number of children. Again, limitation of number of children has to be considered in terms of the values of the religion to which an individual subscribes. Religious values may permit family limitation, but take a firm stand regarding the means of doing so. The need for changes in values also arises sometimes. Values that were functional in a certain context may be dysfunctional in another. For example, when infant and child mortality was high, it was important to have four or five children in order to ensure the survival of one or two. Thus, in the past, having a large number of children was both an individual value, and an accepted social norm, but it is dysfunctional in present-day conditions.

It is one of the tasks of population education to assist individuals to examine values and social norms with a view to making them perceive the desirability of changing some of them. Questions of ethics also enter in one way or another. For examples, are disincentives for procreating more than two children ethical? On the other hand, is it ethical for parents to have more children than they can comfortably provide for? Psychological stress is the subject matter of some of the selections. This is because emotional satisfaction, and a feeling of harmonious existence are essential ingredients in quality of life.

In the final analysis, life styles are also a matter of values. The adoption of values mirrored by life styles that are not consumption oriented but modest in their demands on natural resources, and supportive rather than destructive of ecological balance, is important and much needed from the point of view of quality of life. Quality of life is in part a subjective feeling, in which a sense of being adequate and not different from others is important. This explains the inclusion of a selection dealing with clothing. It is reasonable to assume that a child who feels inadequate in the matter of dress would not be entirely at ease. The inclusion of a selection on law needs a word of explanation. Laws are important as a regulatory mechanism for individual and collective behaviour, and they need up-dating with a focus on quality of life in the circumstances of the present-day world.

Section 10: Curriculum and instructional materials

The selections in this section are taken from Bangladesh, India, Republic of Korea, Malaysia, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand and the United States. One (taken from a Unesco publication) deals with the out-of-school sector and refers to course content identified at two workshops as being suitable for integrating population into non-formal development programmes. The publication from Papua New Guinea is described as a handbook for extension workers, but it presents content which can be used as instructional materials for both in-school and out-of-school sectors. The publication from Pakistan refers to both in-school education and adult education. The self-learning modules from Malaysia and the Philippines are part of a set of self-learning modules

developed in each of these countries for training teachers. All the remaining publications bear directly on the in-school sector.

The selected publications cover a broad range of quality of life themes. Some of them identify the themes and the major concepts that should be introduced. In other words, they more or less outline the content that should be incorporated. In the case of the majority of the selected publications, they present actual lessons, detailing teaching-learning methods and activities. Reference should be made to the original documents to see in concrete terms how a quality of life theme is broken down into a set of meaningful concepts, and introduced to learners through a graded sequence of activities. In several of them, pre- and post-tests have been included to make it possible for assessments to be made of learning outcomes.

Section 1: Defining and Measuring Quality of Life (QOL)

QUANTITATIVE APPROACHES TO QUALITY OF LIFE

Booz–Allen Public Administration Services. *The quality of life concept: a potential new tool for decision-makers.* Springfield, Va., National Technical Information Service, 1973. 300 p.

This is the report of a symposium held in the United States with the objectives of exploring the concept of quality of life (QOL), defining it in terms of its components, and developing quantitative approaches to its use in guiding public policy. The report is in two sections, the first dealing with the issues regarding quality of life raised during the symposium, and the second containing a revised version of an anthology of papers first published in preparation for the symposium.

No two individuals entertain identical views regarding what constitutes quality of life, but a consensus does exist regarding the importance of the concept, the needs to define it, and possibly to measure it, and finally its significance as a guidepost to human endeavour.

While quality of life may be viewed from the broad perspective of a nation as a whole, the perspectives of different groups within it may differ. One chapter in the report views quality of life from the broad perspective of the American public as a whole, and from four different perspectives, namely those of youth, women, blacks and other racial minorities, and the aged. Quality of life may also be viewed from an interdisciplinary perspective, or from an environmental, an economic, a psychological or a sociological perspective, and one chapter of the report is devoted to a presentation of these. The imprecise nature of the quality of life concept gives rise, in the opinion of some, to the need for making a serious attempt at quantification, but there are others who have reservations about making such an attempt. However, the report describes several attempts that have been made at quantification, first by identifying a set of factors, indicators or components, and thereafter by suggesting methods of measurement. The symposium itself carried out a quantification exercise, with nearly fifty factor items, grouped under five major component headings, namely 1) natural environment; 2) man-made environment; 3) social; 4) political; and 5) economic. In the light of the discussion, a certain measure of agreement was arrived at regarding 47 factors grouped under three component headings viz., economic, political/social, environment. Judgements were elicited from the participants regarding the relative weights that should be assigned to the various factors. The substantial spread in the weights that the sample population assigned to the factors was quite striking. The ten most highly weighted factors when the weights assigned by the participants were pooled together were the following: democratic process, public participation, health, choices in life, housing, economic security, education, land-use, essential living costs, and economic opportunity.

The second section of the report contains six chapters and a list of references. The chapters are entitled (1) Defining quality of life measures - the state of the art; (2) The quality of life concept; (3) QOL: Environmental perspective; (4) QOL: Economic and social perspectives; (5) QOL: Psychological perspectives; and (6) QOL: Attempts at comparative statistics.

Descriptors: *Concepts; Measurements; Definitions*

Source: National Technical Information Service
U.S. Department of Commerce
Springfield, Va. 22151
U.S.A.

VARIABLES IN MEASURING QOL

Ling, Ooi Giok. *The geography of socio-economic health and distress in the Northwestern Peninsular Malaysia.* Singapore, Southeast Asia Population Research Awards Program, Institute of Southeast Asian Studies, 1978. 88 p. (SEAPRAP research report no. 30.)

Several attempts have been made at the quantification of quality of life variables, and the study under review represents one such attempt. It reports both a macro-scale study and a micro-scale study. Attention will be focused here on the latter, as it is adaptable for surveys which may be undertaken as exercises by trainees in population education programmes or mature students enrolled in population education courses.

Socio-economic health is a composite concept, defined by measuring the twenty-four variables listed here, in the context of the urban setting selected for the study: (1) Median household size; (2) Median level of education of household heads; (3) Median level of education of residents older than 17 years of age; (4) Percentage of unemployed; (5) Amount of money spent on food per head per day; (6) Percentage of households owning cars; (7) Percentage of households in multi-household dwellings; (8) Percentage of sound housing; (9) Mean number of persons per room; (10) Percentage of residents aged 60 years and above; (11) Percentage of residents aged 15 to 45 years; (12) Median household income; (13) Percentage of residents in irregular forms of employment; (14) Percentage of outmigration; (15) Percentage of juvenile delinquents; (16) Percentage of social welfare recipients; (17) Percentage of crimes committed; (18) Percentage of dropouts from school; (19) Percentage of residents more than 25 years old with at least 4 years of schooling; (20) Percentage of blue collar workers; (21) Percentage of white collar workers; (22) *Per-capita* income; (23) Dependency ratio; (24) Percentage of Indian residents (This variable was considered necessary in the specific urban setting in which the study was conducted.)

These measures of socio-economic health were chosen on the grounds that they could explain the health and distress experienced by the urban residents. The urban area was divided into a number of neighbourhoods, and for each variable a rank was given to each neighbourhood, a rank of one indicating the neighbourhood that is considered most healthful for a particular variable. By adding the ranks together it was possible to compute a composite score for each neighbourhood, and thus identify those most disadvantaged. This will enable the proper channelling of assistance for improving socio-economic health.

Descriptors: *Health; Socio-economic factors; Malaysia*

Source: Southeast Asia Population Research Awards Program (SEAPRAP)
Institute of Southeast Asian Studies
Cluny Road, Singapore 10
Republic of Singapore

MINIMUM STANDARDS

Markley, O.W. and Marilyn Bagleys. *Minimum standards for quality of life.* Menlo Park, Calif., Standard Research Institute, 1975. 193 p.

The authors point out that most approaches to the assessment of quality of life (QOL) have sought to develop a set of indicators representative of all levels of life condition, both high and low. It is their view that encompassing all levels of life condition makes the task of developing indicators unmanageable, and that it would be more feasible to focus on quality of life minima (QOLM). These would be the minimum standards for life quality in terms of commonly accepted notions, existing laws, and court decisions.

They explore a wide variety of QOL concerns, belonging roughly to the following six categories: Economics, Health, Social, Political, Natural Environment, and Physical Environment. Within each category, three types of information were compiled: 1) subjective data that show how people feel about various aspects of the quality of their lives; 2) public laws and other less formal understandings that establish minimum standards; and 3) objective data (indicators) that reflect how well those standards are being met. For purpose of analysis and presentation, these types of information were further categorized in a matrix according to the extent to which they are related to basic needs (defined as physiological, safety, or security concerns), and higher needs (defined as social, ego, and self-fulfilment concerns), and according to four logical levels of concern: 1) threshold level - the setting of a substantive standard of quality; 2) security - the provision of safeguards that the substantive standard will be met through time; 3) equal access - standards ensuring that all persons are afforded access to safeguards; and 4) ability to influence - standards that allow individuals to influence the setting of minimum standards and that allow individuals their own methods for achieving tolerable life conditions.

The potential utility of QOLM was assessed for several possible applications: 1) the systematic arraying of both existing minimum standards and secondary source objective indicators for measuring conditions of life quality of various governmental levels; 2) the monitoring and reporting of substandard conditions in society; 3) the estimating of impacts of emerging technologies in life quality; 4) the simulation modelling of societal or environmental interactions; and 5) the monitoring of citizen (dis)satisfaction.

The general conclusion reached by the study team was that the approach of using public standards that set quality of life minima as a general guide for QOL assessment has sufficient feasibility and potential utility to warrant further development.

Descriptors: *Minimum Standards; Matrix Analysis; Legislation; Norms*

Source: Stanford Research Institute
Menlo Park
California 94025
U.S.A.

PHYSICAL PLUS SPIRITUAL NEEDS

Sharma, R.C. "Population and socio-economic development". In: Sharma, R.C., *Population trends, resources and environment: handbook on population education.* New Delhi, 1975, p. 109-131.

While emphasizing that quality of life is a relative concept, measuring different things to people from different cultures though there are some generally accepted criteria, the author offers his own interpretation in the following terms: "The quality of life is a very complex concept as it involves the satisfaction of the emotional needs and social aspirations of the community or society as well as the society's ability to meet the basic needs of food, energy, space, housing etc. by itself". Two emphases in the statement give it a "quality" that is somewhat different from the generality of statements that are made about quality of life. One is the primacy given to emotional satisfaction, which goes beyond the satisfaction of the needs for food, shelter etc. to encompass the less tangible aspects of life such as psychological, aesthetic and spiritual needs. The second is the concluding phrase "by itself", which implies a society that is stable and can live harmony with nature without endangering itself or the environment for an indefinite period of time. In the words of the author: "There may be four principal conditions of a stable society - one that to all intents and purposes can be sustained indefinitely, while giving optimum satisfaction to its members. These are: 1) minimum disruption of ecological process; 2) maximum conservation of material and energy or an economy of stock rather than flow; 3) a population in which recruitment equals loss; and 4) a social system in which individuals can enjoy than being restricted by, the first three conditions". The criteria which may be used to compare quality of life in various societies are grouped by the author into two major categories:

1. The quantity and quality of the basic physical needs of man such as food, fresh air, fresh water, housing, clothing etc.
2. The quantity and quality of the social and cultural needs of man such as educational and employment opportunities, medical and health facilities, conditions of works, security, transportation, human freedom, recreation and entertainment, opportunities for creative development and so on.

Not all of these are quantifiable but, of course, the value of those which are not quantifiable is none the less important Population can affect quality of life in terms of the availability of food per capita, GNP and per capita income, educational and employment opportunities, facilities for health and sanitation, housing etc. The author examines, with reference to India, the impact of population growth on 1) availability of food; 2) socio-economic development; 3) literacy; 4) employment opportunities; 5) health services; 6) housing; and 7) recreational facilities, and comes to the conclusion that rapid population growth has been a major factor in causing deterioration in respect of each of these, thereby hindering efforts to improve the quality of life of the people of India. The exercise which he carries out for India can be replicated for any other country, and it is specially important for countries embarking on programmes of population education to do so, and thereby build up a knowledge base specific to themselves.

Descriptors: *Concepts; Natural Resources; Socio-economic Development; Environment; India*

Source: Dhanpat Rai & Sons
1682 Nai Sarak, Delhi-6
India

Section 2: General

ENCOURAGING THE SIMPLE LIFE

Allen, Robert. "Towards a primary life-style". In: Meadows, Dennis L., ed. *Alternatives to growth – I: A search for sustainable futures.* Cambridge, Mass., Ballinger Publishing Co., 1975, p. 313-329.

The growth and maintenance of an industrial economy demands that luxuries become essentials, but this transformation can be effected only at the cost of energy, capital and effort, with consequent deterioration of the ecosystem, social disruption, inflation, and loss of non-material satisfactions such as health and peace. The process becomes increasingly more difficult. The industrialized countries could satisfy their wants only because there were poor countries to supply them with low-cost raw materials. The latter are diminishing progressively. Moreover, the poor countries themselves are entering the race, and making it more difficult for the industrialized countries. Prices go up for both essentials and luxuries, and nearly all countries, industrial and non-industrial, are in the grip of inflation and disequilibrium.

There are signs that a new prospect for equilibrium is in sight as a result of the development of new norms. These signs include: (a) the growing demand for social and environmental services that divert capital and labour from industry, thus slowing economic growth, whether intentionally or not; (b) the growing interest in the concept of equilibrium, and the increasing number of well-argued appeals that equilibrium should be a prime policy goal; (c) the formation of small communities, generally at the tiny "commune" level, with the object of developing a life-style consistent with and promoting equilibrium; (d) the continued, and somewhat miraculous, survival of societies of hunter-gatherers, hunter-gardeners, and other modest rural economies, that have lived in equilibrium for many generations.

It is important not to wait passively for these new norms to develop, but to identify the conditions likely to accelerate their appearance. The initiation of new norms will have to be the responsibility of small communities. These may be small nations, or small communities within large nations, and they would hopefully adopt primary life-styles, defined as life-styles in which people eschew excessive consumerism and live intimately within their environment, being to a significant extent self-sufficient and self-governing. There would be no rejection of technology, but instead of the people being subservient to technology, technology would be subservient to people and their needs. The writer analyses the conditions that obtained in primitive societies which adopted satisfying primary life-styles, and derives guidelines that may be applicable in the context of the present day to encourage the development of life-styles that have harmony and equilibrium.

Descriptors: *Social Values; Social Structure; Self Reliance*

Source: Ballinger Publishing Co.
17 Dunster Street
Harvard Square
Cambridge, Mass. 02138
U.S.A.

PROVIDING BASIC HUMAN NEEDS

Cassen, Robert and Margaret Wolfson, ed. *Planning for growing populations.* Paris, Development Centre, Organisation for Economic Co-operation and Development, 1978. 227 p.

This book arose out of a concern that, compared with the amount of attention given to the problem of population limitation, important as it undoubtedly is, inadequate attention was being paid to the conditions of the population now with us. It was considered that in developing countries vast masses of the population lack the basic goods and services that are indispensable for a decent human existence, not because of the indifference of their governments, but because resources are inadequate and their utilization tends to favour the stronger elements of society rather than the most deprived. There is a need therefore to explore alternative approaches to the provision of basic human needs so as to improve the quality of life of the most disadvantaged sections of the population.

The basic quality of life needs considered in the book are: 1) food supplies and nutrition; 2) education; 3) health; 4) housing; and 5) employment. A chapter is devoted to each of them. The chapter on food supplies and nutrition deals with food requirements, the problems of supply and distribution, nutritional levels, and then goes on to analyse a number of action programmes. From the insights suggested by this analysis, recommendations are made for a new approach to food and nutrition as part of rural development planning. In regard to education, much of the current dissatisfaction with educational systems in developing countries is focused not on the inadequacy of the resources but on the uses to which available resources are put. They are indicted on charges of inequality, favouring urban populations over rural, rich over poor. The model of the industrialized countries has definitely to be eschewed, and the lines along which solutions are to be sought seem to be: definition of educational needs by the masses, discussion of educational objectives, participation in mobilization of available resources, equality of access, and forms of popular education for all. The chapter on health argues that health planning in the past has been designed for improving the health conditions of a part of the population rather than the whole population. The major part of the health expenditure is devoted to the provision of health facilities in urban centres, while in the rural areas the small number of health personnel available spend their time curing the sick without altering the environment that generates sickness. Three basic defects in health-planning are pointed out: a neglect of non-medical aspects of health; within medical services, an excessive concentration on curative medicine; and within curative services, a socially and geographically selective bias. A planning approach that radically alters this scheme of priorities is advocated. In regard to housing, the need is not for grandiose schemes divorced from economic and financial realities, but for low-cost and self-help housing. As far as employment is concerned, it is clear that modern sector growth is incapable of absorbing the rapidly expanding labour force. Solutions seem to lie in the direction of redistributing opportunities, incomes, and assets in favour of poor, rural and small-sectors. But fundamental social reforms are necessary for these to be a reality.

Quality of life: population education

Descriptors: *Socio-economic Conditions; Social Indicators; Food; Education; Housing; Employment; Health Services*

Source: Development Centre
Organisation for Economic Co-operation and Development
2 rue André-Pascal
75775 Paris, Cedex 16
France

CHINA: CONTROLLING POPULATION GROWTH

Liu Chen and Wu Tsangp'ing. "[It is imperative to bring population growth under control]". *The People's Daily, 15* May 1979. English translation under title "The economic rationale for population control in China", in *Population and Development Review,* vol. 5, no. 3, p. 559-563.

This is the translation of an article, written by Liu Chen and Wu Ts-ang-p'ing of the Institute of Population Research, People's University of China, Beijing, and published in the national newspaper Renmin Ribao (the People's Daily) of the Republic of China. It points out that the population of China has increased from 500 million at the time of liberation to 900 million, largely as a result of improved technologies of food production, improvements in standards of livings, the wider availability of medical and health services, and the consequential fall in mortality rates. Steps for the encouragement of family planning were not taken prior to the 1970's. The authors confine their attention to macroeconomic considerations in urging the need for a reduction in the rate of population growth. Advances in technology invariably reduce the size of the labour force required to produce a given output. Already, the size of the labour force required for work in agriculture has come down, and there is the problem of the absorption of labour in productive employment. When the production capacity of the economy cannot absorb large increases in the working-age population, underutilization of labour takes place with loss in per capita labour productivity. Capital accumulation is also limited by a rapidly growing population, as very little is left over after satisfying the basic needs of the population. Improving the level of scientific and technological training of the population is also slowed down by the rapid increase of population. Rapid population growth is thus seen as an impediment to labour absorption, increased labour productivity, capital accumulation, and improved scientific and technical training. The article also points out the economic burden that a large population of youthful dependents places on the provision of food supplies and an adequate education. Population growth thus endangers the achievement of the "four modernizations" – those of agriculture, industry, national defence, and science and technology – which the writers regard as being crucial for their country. The conclusion is that it is only by a purposeful programme of population control that it would be possible to meet the people's demand for a rise in their level of living.

Descriptors: *Economic Factors; Population Control; People's Republic of China*

Source: Population and Development Division
Population Council
One Dag Hammarskjold Plaza
New York, N.Y. 10017
U.S.A.

MALAYSIA: QOL OF MINORITIES

Malaysia. Ministry of Finance. *Economic report 1978/79.* Kuala Lumpur, 1978, p. 157-178 (Quality of life in Malaysia).

The chapter on Quality of Life in Malaysia in the Economic Report of the Ministry of Finance for 1978/79 focuses on five areas, namely the quality of life of rubber smallholders, the quality of life of the Orang Asli (a relatively heterogeneous group of numerically small and scattered indigenous ethnic groups in Peninsular Malaysia), nutrition, family planning, and public safety. The chapter therefore adopts a case study approach in dealing with two population groups, and also discusses three quality of issues in general terms.

A rubber smallholding is defined as a contiguous area, aggregating less than 100 acres, planted with rubbers or on which the planting of rubbers is permitted under a single ownership. The upper limit mentioned masks the dimensions of the problems faced by rubber smallholders, which can be seen in their true perspective only with the further information that the average size of a holding is only 5.8 acres, and that many of the households live below the poverty line. Over the five year period 1971 to 1976 there has been a substantial increase in their income, resulting from several factors among the most important of which are: 1) research inputs ensuring better quality rubber through better processing and marketing, both government inspired efforts; 2) introduction by the government of incentives for replacing old low-yielding rubber trees with new high-yielding clones; 3) a general increase in the price of rubber; and 4) income accruing from secondary economic activities. Average family size of rubber smallholders, however, ranges between 5.1 and 7.3, and it is by the adoption of a small family norm that their economic status and quality of life could be greatly improved.

The Orang Asli are predominantly farmers practising shifting cultivation. A government department has been established for undertaking measures to improve their socio-economic condition. These measures include the provision of basic social services such as education and health, and the implementation of land development and other projects. The number attending primary school has increased by 26.1 per cent over the period 1971 to 1976, the increase being from 6,487 pupils to 8,181 pupils. While there was not a single student enrolled in the sixth form or above in 1975, there were 25 enrolled in 1978. Agriculturally, they are being weaned away from shifting cultivation by grants of land to planting rubber, coconuts, and other crops. A rural health service consisting of medical posts, emergency posts and a flying doctor service has also been organized.

The discussion of nutrition emphasizes that special attention is paid to the nutritional needs of children. The results of these measures are reflected in the decline of toddler mortality between 1970 and 1976. There has also been a general improvement in the nutritional level of the entire population as indicated by the per capita calorie and protein availability.

Family planning, adopted as a national policy in 1966, has made an impact as shown by the reduction in the birth rate from 37.3 per thousand in 1966 to 30.3 by 1975. Age specific fertility rates have also gone down between 1960 and 1975.

The data on crime rates show an increase between 1974 and 1977 in the crime

rate per 100,000 persons, but no breakdown by population groups (e.g. urban-rural) is available. In regard to traffic accidents, however, most of which are directly attributable to conditions of urban life, there has been a doubling during the period 1974 to 1976.

Descriptors: *Socio-economic Conditions; Social Indicators; Health Services; Education; Land Development; Nutrition; Malaysia.*

Source: The Deputy Director
General of Printing,
Peninsular Malaysia
Jalan Chan Sow Lin
Kuala Lumpur 07-03
Malaysia

POPULATION EDUCATION AND QOL

Mascarenhas, Marie Mignon. *Population education for quality of life.* Bangalore, Family Welfare Centre, 1974. 547 p.

This book is in four parts, entitled population and demography, population and health, population and education, and finally population and the family. In the first part, the author gives basic population data for the world and for India, and proceeds to discuss, with reference to the Indian situation, the issues of overpopulation, population and urbanization, population and ecology, population and economic growth and development. Two concluding chapters deal with the population problem as a world concern, and with population policies, both in general terms and with reference to the policies pursued in India.

Part two is concerned with population and health. Data pertaining to the health situation in India provides the background for a discussion of the health problems of the individual. Food production is also discussed in this part with reference to the land resources of India, and bringing about improvements in the quantity and quality of food available to the population.

Part three focuses on population and education. Quoting a statement to the effect that to forge character is the target of education, primacy is given to a discussion of character and moral education, and the relationship between education and cultural values. It is followed by a consideration of literacy and certain other aspects of education. The relationship between education and its impact on fertility is then discussed. The instrumental role of education in promoting fertility behaviour that would contribute towards the alleviation of individual and social problems is emphasized in chapters dealing with sex education for adolescents, population education, family life education, and health education for family planning.

Part four consists of a miscellaneous assortment of chapters entitled "The family in India", "Family size, fertility and its determinants", "The reproductive system", "Sexuality", "Population control", Contraceptive technology", "The unborn child", and finally "Society and responsible parenting". The thesis of the chapter on society and responsible parenting is that responsible parenthood, possible only in the context of the small family, is of critical importance for the harmonious psycho-social development of the child, and that as the child grows up the norms of reference groups outside the family also influence behaviour.

The book, in fact, delineates what the author regards as appropriate content for population education in its bearing on

quality of life.While most of the data and the discussion relate to the Indian situation, a great deal of what is stated in the book is generalizable and applicable, *mutatis mutandis*, to other developing countries.

Descriptors: *Socio-economic Conditions; Social Indicators; Health; Food; Education; Nutrition; Environment; India.*

Source: Family Welfare Centre
21 Museum Road
Bangalore-25, India

QOL AMONG MALAYSIAN CHILDREN

Sanders, Eleonora and others, eds. *For the well-being of Malaysian children.* Serdang, Department of Home Technology, Universiti Pertanian Malaysia, 1979, 115 p.

Consisting of 16 chapters, this book is of interest to all concerned with the well-being of children, in whatever country they live. From the point of view of population educators, the Introduction, and the chapters entitled "Responsible parenthood", "Nutritional needs and status of Malaysian children", "Malnutrition and mental development", and "The handicapped child" are of interest as they emphasize population/parenthood and quality of life relationships.

The introduction neatly summarizes the costs of development, and the costs of 'underdevelopment' in the Malaysian situation. The costs of development are 1) population movement to already overcrowded towns and cities; 2) increased unemployment; 3) increase in accidents, especially those involving vehicles; 4) increase in drug abuse; 5) increase in heart attacks, hypertension, overweight and lung cancer; 6) soil erosion; 7) water and air pollution; and 8) increase in venereal diseases and crime . The costs of underdevelopment are: 1) disease; 2) ignorance and little education for the masses; 3) poverty; 4) exploitation by foreign powers; 5) isolation and in-breeding; 6) malnutrition. It will be noted that several of these factors have a population factor underlying them.

The chapter on responsible parenthood has a useful list of the rights of children, and although it is taken from a book published in the United States few will doubt its universal applicability. Observance of these rights calls for planned parenthood, with all that it involves for pre-natal care, and care in infancy and childhood. The adoption of a small family norm is seen as essential in this context.

The two chapters dealing with nutrition are important for a population educator in that they emphasize the fact that variables pertaining to fertility are among the factors that could contribute to nutritional status, which has significant implications for the all-round development of the child.

The chapter on the handicapped child points out the high risk factors that are associated with physically or mentally handicapped children. Some among them are related to fertility behaviour, and the care exercised by the mother from the point of conception.

The book poses two important questions:

1. How are citizens influencing and supporting legislation, organizations, families and individuals to protect values that will lead to optimal quality of everyday living?

2. Are the government, education and religion giving positive and practical support to children and their teachers as they strive to choose values appropriate to the "new life"?

Descriptors: *Child Health; Nutrition; Social Welfare; Malaysia.*

Source: Department of Home Technology
Universiti Pertanian Malaysia
Serdang, Selangor
Malaysia

INTEGRATING POPULATION FACTORS WITH NUTRITION

United Nations. Economic and Social Commission for Asia and the Pacific. *An integrated approach to population, food and nutrition policies and programmes for national development.* Report of a Regional Seminar, Bangkok [1980]. 39 p. (Asian population studies series no. 45)

This seminar was organized by ESCAP as it had become increasingly apparent that if rural development is to achieve its objective of improving the quality of life of the vast majority of the people in the ESCAP region, a measure of integration in the organization and delivery of services to the people is essential. In particular, it is expected that linking policies and programmes designed, *inter alia*, to moderate population growth, increase food supplies, ensure an equitable distribution of food, maintain adequate levels of nutrition and improve health care and control infection would have a salutary effect on the health and well-being of the people.

The seminar was attended by participants from 11 countries of the ESCAP region by the representatives of a number of United Nations and other international agencies. The advantages of an integrated approach were identified as follows: relative cost-effectiveness and efficiency, greater acceptability by families, balancing community demand and professionally determined need, greater satisfaction and challenge to workers, specific linkages between family planning and maternal and child care.

In connection with the development of a food policy related to nutritional needs and to quality and size of population, the following issues were discussed and a number of recommendations made: food prices, food aid, food trade, and food production.

The seminar also examined some of the factors that would be crucial to implementing an integrated population, food and nutrition programme. There were points of linkage which held promise for integration, administration of integrated programmes, communication and education need to obtain community participation in the programme, manpower development, evaluation of the programme and the anticipation cost-benefits of integration. Potential problem areas in connection with integration were also identified and discussed.

The seminar also prepared a set of guidelines for developing integrated population, food and nutrition policies and programmes. The guidelines dealt with goals and objectives, and with strategies. The discussion of strategies contained eight subheadings as follows: 1) Development of an integrated policy; 2) Adoption of policy; 3) Planning for implementation of policy; 4) Organization and management;

5) Specific operational strategies; 6) Manpower development; 7) Evaluation of programmes; 8) Research.

The seminar concluded with two sets of recommendations. One set is for implementation by countries, and the second set is for implementation by ESCAP.

Descriptors: *Integrated Rural Development; Food; Nutrition; Asia.*

Source: ESCAP Population Division
Clearing-house and Information Section
Rajdamnern Avenue
Bangkok 2, Thailand.

HOW POPULATION CAN AFFECT QOL

Unesco Regional Office for Education in Asia. *Population education in Asia: a source book. Booklet 4: Population: quality of life themes.* Bangkok, 1975. 180 p.

In the view of the team of writers who wrote the source book, the concept of quality of life connoted extension and deepening of human capacities, in individuals as well as in the societies that they form. The themes selected for treatment are: food and nutrition, health, education, environment, income, employment, the status of women, and housing. These themes are taken as representing some of those external conditions without which human capacities, in individuals and in societies, suffer grave deprivation, but it is emphasized that they do not encompass all the elements, many of them intangible, that make up the complex web of quality of life. Each quality of life theme selected for discussion is affected in one way or another by population change, and in turn affects population change. The analysis presented attempts to describe the interrelationships and their bearing on the common concern for quality of life.

There are six chapters of which the first five treat the themes at macro-level with reference to the countries of the Asian region. In the sixth chapter, the focus changes and population issues and quality of life themes are examined in terms of individual and family events and of how individual and family decision making shapes quality of life at the micro-level, and in their aggregate at the macro-level.

Each chapter opens with a broad survey of the current situation, and then proceeds to an analysis of the different ways in which rapid population growth influences or affects the theme. As quality of life issues are interrelated among themselves, each chapter presents an assessment of some aspects of these interrelationships and the alternative paths for the future. Every effort has been taken to include data from within the region in discussing the interrelationships between population dynamics and quality of life themes.

Descriptors: *Socio-economic Conditions; Social Indicators; Food; Nutrition; Health Services; Education; Income; Employment; Housing; Women's Status; Asia.*

Source: Unesco Regional Office for Education in Asia and the Pacific
Population Education Clearing House
P.O. Box 1425
Bangkok G.P.O.
Bangkok, Thailand

SELF RELIANCE IN IMPROVING QUALITY OF LIFE

Worldwatch Institute. *Local responses to global problems: a key to meeting basic human needs*, by Bruce Stokes. Washington, D.C., 1978. 64 p. (Worldwatch paper 17)

Unprecedented population growth, resource scarcities, and biological systems have redefined the scope of humanity's most pressing problems in regard to food, housing, health and sources of energy, and the appropriate responses to them. The theme of this pamphlet is that solutions to these problems will come not through highly centralized national and international efforts but through people doing more to help themselves. In regard to each of these aspects of quality of life, the pamphlet first presents data to emphasize the magnitude of the present problems, and proceeds to suggest what each individual or family could do to contribute towards its solution.

In the case of the food problem, it is pointed out that in several countries of the world e.g. the United States, Ghana, the Philippines, Hungary, China and the Soviet Union, intensive small-scale food producing activities ranging from gardening in the back yard to small-scale private farming have become a useful source of food supply. In many cases, the rearing of livestock is also an associated activity. It is emphasized, however, that to derive the maximum benefit from small-scale production, co-operation among producers will often be required. Apart from the positive contribution of these activities, it is also pointed out that large-scale farming has been counter-productive to the extent that there are hidden, social, environmental and economic costs.

In regard to housing, it is pointed out that the dual reliance on commercially constructed housing and on public housing is no longer adequate to meet current needs, apart from the prohibitive cost involved. The new housing has to come from the desire of both rich and poor all over the world to build modestly designed homes with their own hands, using 'family power'. It is stressed, however, that self-help housing can contribute to, but is not a substitute for, overall social and economic development.

The pamphlet argues that ever increasing investments in hospitals, drugs and medical technology are largely irrelevant to the two concerns which dominate people's lives, namely how to be healthy and how to live long. Living healthier and long lives in the future will depend more on individual and community efforts to solve their own health problems. In industrial countries, this will mean a cleaner environment and changes in personal life-styles, habits and diets. In developing countries, preventive health measures with a strong component of health education, and improved access to simple medical care are crucial in this regard. Medical auxiliaries, more than highly qualified doctors, are means of making health care both accessible and efficient.

In regard to the requirement of energy, self-reliance has become the touchstone of national and local energy policies. The most effective way to increase national and personal energy self-reliance is through conservation measures and the use of solar energy - from sunlight, wind, water, and green plants. These long-neglected energy sources are sustainable, efficient, socially manageable, and available at the local level. Their use normally depends on small-scale

technologies that involve the energy consumer directly.

On the whole, the pamphlet is commendable for the emphasis it places on self-reliance, and co-operation within the family and the local community, as means of alleviating some of the current problems facing mankind.

Descriptors: *Socio-economic Development; Social Indicators; Housing; Energy; Health Services; Self-Reliance.*

Source: Worldwatch Institute
1776 Massachusetts Avenue, N.W.
Washington, D.C. 20036
U.S.A.

Section 3: Food Production

BALANCING FOOD SUPPLY AND POPULATION GROWTH IN BANGLADESH

Chen, Lincoln C. and Rafiqul Huda Chaudhury. "Demographic change and food production in Bangladesh, 1960-74", *Population and Development Review*, 1(2): 201-227, December 1975.

Although this article refers to the period 1960-74, the points emphasized in it are relevant to the decade of the 1980's as well. The economy of Bangladesh is overwhelmingly dominated by agriculture, which contributes over two-thirds of the GNP and absorbs over three-fourths of the rural labour force. Moreover, there is no question of rural depopulation, as Bangladesh is the most densely settled rural nation in the world. In spite of these seeming advantages, the country faces a precarious balance between food supply and population growth.

As a result of the demand generated by population growth, and the incapacity of the rate of food production to keep pace, per capita food availability and caloric and protein levels show a decline. The absolute size and proportion of the rural power has increased, and the disadvantaged population has fared worse nutritionally than others.

Remedial measures should take several forms. There should be wider acceptance of the small-family norm, and there should be a slowing down of population growth. Agricultural production can be improved considerably. Current crop yields in respect of rice are only a fraction of the proven potential realizable with existing technology. Social reforms may, however, be needed to ensure the effective application of technology. The former should include measures to bring about an equitable distribution of benefits. Efforts should also be directed towards turning food production towards high protein varieties. In particular, domestic food sources such as pisciculture, and the cultivation of wheat and pulses, soya bean and other vegetables should be developed so as to improve the quality of nutritional intake. An infrastructure of transport facilities should also be provided to enable food supplies to be moved rapidly from surplus to deficit areas. These measures have to be put into effect with energy and determination, if the increasing reliance on food imports that has characterized the past is to be arrested.

Descriptors: *Agricultural Development; Food Supply; Bangladesh*

Source: Population and Development Review
Population Council
One Dag Hammarskjold Plaza
New York, N.Y. 10017
U.S.A.

POPULATION INCREASES WITH FOOD PRODUCTION

Lio, Koichi, and others. *Population growth and food problems in selected Asian countries.* New York, United Nations Fund for Population Activities, 1979. 35 p. (Policy development studies no. 3)

This publication projects up to 2000 A.D. the food demand and the food supply

positions for Asian countries. In obtaining the projections for food demand, two scenarios presented in a United Nations study entitled *The Future of the world economy* by Wassily Leontief, et al are used. The difference between the two scenarios is that one is based on the assumption of a 3.1 per cent growth of per-capita GDP between 1970 and 2000, while the other is based on a 4.9 per cent growth of per-capita GDP. The former was applied to countries which had a per-capita GDP below $200 in 1976, while the latter was applied to countries whose per-capita GDP was higher. The average per-capita calorie intake in the region was calculated to be 2,057 in 1975, and it is estimated that it would increase to 2,691 by 2000 as a result of qualitative and per-capita quantitative improvement. This means that average calorie intake will increase 1.3 times during the period 1975 to 2000. Meanwhile, the population is expected to increase 1.8 fold during the same period. Therefore, the total calorie demand, which is a combination of the per-capita calorie intake increase and the expected population increase, is expected to become 2.36 times as large in 2000 as it was in 1975, and this means that the total calorie demand will increase at an annual rate of 3.5 per cent. The authors then go on to consider the grain supply position, taking into account both the expansion of the cultivated land area and the improvement of productivity, and show that the average annual increase in the rate of grain supply would be 2.4 per cent. It is barely adequate to meet the need generated by the increase in population, and hence rules out any quantitative or qualitative improvement in the production of food. In other words, it is only by curbing population growth that people in the Asian countries can improve their nutrition quantitatively and qualitatively.

Descriptors: *Food Supply; Asia.*

Source: UNFPA
485 Lexington Avenue
New York, N.Y. 10017
U.S.A.

ALTERNATIVE MODELS FOR SOLVING FOOD PROBLEMS

Meadows, Donella. "The world food problem: growth models and non-growth solutions" In: Meadows, Dennis L., ed. *Alternatives to growth - I: a search for sustainable futures.* Cambridge, Mass., Ballinger Publishing Co., 1977, p. 7-44.

Two United Nations Conferences in 1974, one in Rome and the other in Belgrade, emphasized the interlocking nature of two major global problems: rapid population growth and food shortages. While there is a consensus that it is one of the most important social problems confronting the world in the sense that if it is not solved it would give rise to many other problems and conflicts, there is disagreement as to what policies would be most effective and who should carry them out. The author makes an assessment of the current population-food situation, and points out that assessments are usually relative to time perspectives, whether one is interested in the short-term or the long-term, and space perspectives, whether one is interested in the domestic or the global problem. She argues that a wise policy maker must keep in sight the near and the distant both in time and space, if a solution is to be reached. She distinguishes four different ideological approaches to the design of food-aid policy: the Western ideal of free-market trade, the environmentalist concern for physical limits, the socialist pursuit of equality, and the positive effects of the industrialization process.

Then she suggests a composite model. The implications of the composite model are discussed, and she groups into three major categories all possible solutions to the food problem. These categories are: produce more food, allocate food more equitably, slow population growth. While urging that all three policies should be resolutely pursued, she argues that population control being the only ultimately effective solution and the one with the lowest total cost should receive the most effort. She concedes that it would take time, and that while pursuing a population control policy with vigour, the other two policies should also be simultaneously pursued. Second in her order of priority is food redistribution, as it is morally desirable and can give immediate results with low ecological and economic costs. The next priority is food production which, she argues, should be labour intensive in order to use the major resource of the most needy countries, and should take into account conservation of energy and natural eco-systems, as well as increased output. A leadership role is envisaged for the United States in working towards a solution to the population-food problem. It is suggested that the United States should announce population stabilization as a domestic goal, and link foreign aid in health programmes to the design and acceptance of effective, locally-defined birth control measures abroad. At the same time, Americans should move towards satisfying, production life styles based on small families, less consumption, and more concern for the unfortunate of the world.

Descriptors: *Food Policy*

Source: Ballinger Publishing Co.
17 Dunster Street
Harvard Square
Cambridge, Mass. 02138
U.S.A.

IMPACTS OF THE WORLD FOOD SITUATION

World Food Institute. *Proceedings of the World Food Conference of 1976.* Ames, Iowa State University Press, 1977. 685 p.

This conference was organized on a multi-disciplinary basis, and involved the participation of 660 scholars from 70 countries. The publication contains 41 papers read at the conference, and the reports of four working groups on the topics: 1. Impacts of the world food situation; 2. National and international policy; 3. Natural and human resources; 4. Technology and change.

While the entire volume is eminently readable and useful, from the point of view of persons interested in population as related to quality of life, the most interesting part of the book is the report of the working group on impacts of the world food situation. It is divided into three subsections, dealing with the impacts of the food situation on people, environment, national and world development. Malnutrition in infants, children, expectant mothers, and other adults was regarded as a serious problem. Socio-economic restraints rather than technological inadequacies were regarded as the limiting factor, and several suggestions were offered for overcoming them. In regard to the impacts of the food situation on the environment, it was recognized that the necessity for more food and greater productivity has placed the environment under severe stress. The importance of managing the plant-animal system and components intelligently, and the need to supply plant nutrients and water to increase food production were pointed out. The prevention of soil destruction was another factor that received emphasis. Inputs, whether of

fertilizers or pesticides, had to be made without degrading the environment. National and world development were seen as arising from a combination of at least the following: more food, more jobs, more opportunity, more industrialization, greater labour productivity, better health, increases in gross national products, more per capita real income and more participation by the lowest 40 per cent in the society. Food, besides being listed as an item, has interconnections with most of the other variables mentioned, and in that sense received primacy of attention in the discussions of the group on development, too.

Descriptors: *Food Supply; Food Policy; Environment; Nutrition; Health; Agricultural Development*

Source: Iowa State University Press Ames, Iowa 50010, U.S.A.

NUTRITION AND CHILD–BEARING

American Home Economics Association. *Home economics and family planning: resource papers for curriculum development.* Washington, D.C., 1974, p. 44-51. *(Nutrition and the need for family planning,* by C.E. Roderuck); p. 52-56 *(Preschool child malnutrition – a case for family planning,* by Pamela Thompson-Clewry); p. 57-62 *(The development of nutrition/family planning programs: what are the pre-considerations?,* by Brenda Eheart and March Sangor).

These three articles are interrelated and focus mainly on the following issues: 1) the nutritional status of the mother as an important determinant in the quality of human reproduction; 2) the negative relationship between the nutritional standards of mothers and reproductive variables such as high parity, and closely spaced pregnancies; and 3) the negative relationship between family size and the nutritional standards of children. A great deal of research evidence is brought to bear on these issues.

The effects of nutrition date back to the earliest months of pregnancy and continue through its entire duration. The nutritional status of mothers belonging especially to the lower socio-economic classes is adversely affected by high parity and short intervals between pregnancies. Malnutrition in pregnant mothers adversely affects pregnancy outcomes, and among those cited on the basis of research evidence are fetal deaths, still births, premature births, and handicaps at birth. Among the last mentioned, low birth weight is quite important as it pre-disposes babies to neonatal and postneonatal mortality. Eye defects at birth are also mentioned as being associated with mulnutrition in pregnancy. After birth, when the child is being breast-fed, an inadequate diet on the part of the mother reduces the volume of breast milk available to the child and leads to malnourishment and retarded development. In regard to the nutrition of the pre-school child, the following conclusions are reported from a conference on pre-school child malnutrition: "1) Pre-school malnutrition is basically responsible for the early deaths of millions of children; 2) Of those it does not kill, pre-school malnutrition permanently impairs physical growth and probably causes irreversible mental and emotional damage; and 3) Pre-school malnutrition is a serious deterrent to progress in developing countries; it weakens the productive capacities of adults surviving from the irreparable damages incurred in early childhood".

From the point of view of the improvement of the quality of life, it is important that a knowledge of the far-reaching effects on development of the nutrition that a child receives while in the mother's womb and during the first few years after birth should be widely shared among young people and adults. The three articles referred to supply the essentials of this knowledge.

Descriptors: *Maternal and Child Health; Nutrition; Malnutrition; Reproduction.*

Source: American Home Economics Association
International Family Planning Project
2010 Massachusetts Avenue, N.W.
Washington, D.C. 20036
U.S.A.

THE IMPORTANCE OF NUTRITION

Berg, Alan. *The nutrition factor: its role in national development.* Washington, D.C., Brookings Institution, 1973. 290 p.

The author begins with the assumptions that man is the key to development, that the quality of human existence is the ultimate measure of development, and that among the factors affecting the human condition, food-nutritional adequacy is perhaps the major determinant. He cautions, however, that although the well-being of man, and ultimately of nations, may be enhanced by better nutrition, it also depends heavily on economic, educational, environmental, and other factors.

Evidence, based on research findings from many countries, is cited to show that malnutrition adversely affects mental development, physical development, productivity, the span of working life - all of which significantly affect the economic potential of man. In the case of mental development, malnutrition during the fetal period and in infancy is associated with intellectual impairment. As for physical development, while heredity is the key to the ultimate size a youngster can attain, nutrition largely determines how closely he will get to his genetic potential. Nutrition is also important from the point of view of the capacity of an adult for work. Men living on 1,800 calories a day have been shown to lose 30 per cent of their muscle strength, and 15 per cent of their precision of movement. Speed, co-ordination and several other characteristics are also altered. The working life span is also reduced in some cases, as malnutrition is one of the important causes of the high death rate among young adults. Improvements in nutrition can contribute to the national economy through reductions in disease, savings in medical expenditure, increases in productivity, and extension of working years.

Another consideration to be borne in mind is that an improvement in childhood and maternal nutrition, resulting in reduced infant mortality, could encourage the limitation of family size, which in turn could lead to better economic standards and better nutrition, and ultimately to gains in productivity.

In any programme to improve the quality of nutrition, those in the family who most need improved nutrition are the young child, the pregnant woman and the nursing mother. Improved family income can promote better nutrition, but it is not a sufficient condition in itself, as food habits and nutritional knowledge play an important role in determining what kinds of food are consumed. Of all the food habits that require changing, perhaps the most critical are those related to breast feeding and the provision of nutritious food solids to children, and expectant and nursing mothers at appropriate times.

The author suggests several avenues of action that are open to planners in low-income countries: (1) National agriculture and income policies can be changed in ways to improve nutrition; (2) Nutritional deficiencies can be moderated by inducing people to use resources already at hand - through mass media and other educational techniques; (3) Infant nutrition can be improved by reversing the decline in breast feeding and using mother's milk as a valuable natural resource; (4) New and fortified foods can short-cut passive reliance on income growth to make possible better nutrition.

Quality of life: population education

Descriptors: *Malnutrition; Nutrition; Socio-economic Development*

Source: Brookings Institution
1775 Massachusetts
Avenue, N.W.
Washington, D.C. 20036
U.S.A.

HEALTH SERVICES FOR SETTLEMENT AREAS

Hashmi, Sultan S. "The impact of prospective settlement patterns on health strategies in 1980s in less-developed countries". In: International Union for the Scientific Study of Population. *Economic and demographic change: issues for the 1980's; proceedings of the Conference, Helsinki 1978. Vol. 2.* Liege, 1979, p. 35-50.

The article points out that both settlement and health needs are part of the totality of basic human needs, and should be considered in the context of alleviating poverty and improving quality of life. The settlement patterns in prospect are in the direction of movements to cities, and a consequent increase in the disadvantaged population in cities.

With this backdrop, the article addresses itself to the provision of health services to disadvantaged population groups as a whole, and the groups singled out for consideration are the rural folk, nomadic and semi-nomadic people, and the urban slum dwellers. It is pointed out that the health strategies in the developing world have been based on the western pattern, which was aimed at providing sophisticated health services to privileged groups in urban areas. A great deal of expenditure has been incurred on curative services, thereby reducing the resources for the development of basic preventive health services to reach disadvantaged population groups.

Past health strategies have resulted in the neglect of most of the rural, nomadic and semi-nomadic populations as well as most people living in urban slums. Coupled with the neglect of other services to them, there has been so little improvement in their quality of life, with the result that the gap between the rich and the poor has widened.

The article advocates a change of strategy to encompass hitherto neglected groups. It is suggested that programmes should be designed to affect the various components of population change. In order to effect changes in fertility levels, maternal and child health services should be provided on a greatly enlarged basis to ensure maternal health and children's well-being, and such services should be accompanied by the provision of family planning services. In order to effect changes in mortality levels, the living and health conditions of disadvantaged groups should be improved, and greater access to medical facilities should also be provided. Concern is expressed over the fact that in the early 1970s there was an upsurge of death rates in Bangladesh, India and Sri Lanka caused by food shortages, and the need is emphasized for a major effort to ensure that food production programmes are given due priority to prevent a similar situation arising in the future.

As far as migration is concerned, it is recognized that migration from rural areas to urban areas exceeds the manpower demands in the urban areas, and gives rise to unemployment. Strategies for dealing with unemployed urban migrants should

include the provision of vocational training, and special attention to their health needs.

The article identifies the lack of potable water, frequent pregnancies, and the lack of prenatal and postnatal care as the most pressing problems of disadvantaged population groups. The supply of safe drinking water, and maternal and child health services including family planning are suggested as priority areas for bringing about an improvement in the quality of life of disadvantaged population groups.

Descriptors: *Health Services; Health Policy; Maternal and Child Health; Human Settlement; Developing Countries.*

Source: International Union for the Scientific Study of Population (IUSSP)
5, rue Forgeur
4000 Liège, Belgium

FERTILITY AND HEALTH

Taylor, Carl E, and others. "Interactions between health and population", *Studies in Family Planning*, 7(4): 94-100, April 1976.

This article is in two parts, the first considering the effects of high fertility on health, and the second dealing with the effects of health on high fertility. In the first part, the growing body of research evidence on the adverse effects of high fertility upon the health of mothers and children is summarized. There is a sharp increase in the risk of maternal mortality after the third birth. High morbidity is also associated with high parity. Parity beyond the fourth birth directly affects the incidence of stillbirths, infant mortality, and child mortality. Rapid child bearing also has an adverse effect on child survival. When the interval between deliveries is less than one year, fetal, infant, and child mortality are increased. The height and weight of children have been shown to be inversely associated with family size. Mean I.Q. scores have also been shown to decrease with increases in family size. There is a positive relationship between mental deficiency and increasing birth order. Malnutrition is more common in large families, and so is the incidence of respiratory infections and gastroenteritis. It is not suggested that these relationships are causal, but their existence is a matter for concern, and it is reasonable to assume that if fertility could be reduced health hazards would be lessened.

In regard to the effects of health on fertility, the most obvious way in which improved health can increase fertility is by reducing or eliminating diseases that impair fertility. Among the diseases frequently mentioned in this connection are tuberculosis, salpingitis, engometritis, and venereal disease. Better health can also increase fertility by reducing diseases that interfere with completion of pregnancy, such as infectious hepatitis, smallpox, tuberculosis, malaria, syphilis and rubella. Better nutrition also contributes to higher fertility by reducing maternal mortality, fetal loss, and also by extending the fertile time-span. As against these fertility increasing aspects of better health and nutrition, there is the consideration that if there is a reduction in infant and child mortality, parents would not resort to large families in order to make sure that a certain number of children would survive. Several researches indicate that higher fertility among couples was related to experience with or fear of child mortality. Time-series data also show a relationship between declines in death rates and birth rates.

The conclusion of the writers is that family planning services can potentially be more effective, efficient, and acceptable when combined with maternal and child health and nutrition programmes. They also express the view that integrated family planning, health, and nutrition services may be an important entering wedge in the whole process of development through their combined effect on attitudes and values relating to planning for the future.

Descriptors: *Health; Maternal and Child Health; Nutrition; Fertility Rate.*

Source: Studies in Family Planning
Population Council
One Dag Hammarskjold Plaza
New York, N.Y. 10017
U.S.A.

Section 5: Education

POPULATION AND QUALITY OF EDUCATION

Calado, R.R. and ESCAP Secretariat. "Population growth and educational development", In: United Nations. Economic and Social Commission for Asia and the Pacific. *Population of the Philippines.* Bangkok, 1978. (Country monograph series no. 5), p. 231-261.

This article presents data showing recent trends as well as the present status in regard to literacy, school-age population and enrolments, retention ratios and educational attainment. Then it proceeds to discuss future prospects in respect of all of these. A concluding section is devoted to a discussion of the implications of population trends for education.

The article points out that population growth has been increasingly recognized as a major variable affecting educational development. From 1960 to 1975, the population aged 7 years to 12 years increased roughly by 50 per cent, while the 13- to 16-year-olds and 17- to 20-year-olds showed increases of 83 to 73 per cent respectively. The projections are that by 1984 the population of elementary school age will have increased by two thirds and that of the other two age groups will have more than doubled. In accommodating the anticipated increase in numbers, it is not the overall increase in enrolment itself but its distribution among the various levels of education that would impose a severe financial burden. This is because the cost of a student place in secondary education is about five times the cost of a student place in elementary education, while for tertiary education the proportion is as high as 1 to 20. As the country has very nearly achieved universal primary education, no great effort is needed to accommodate the increase in numbers, but the financial burden imposed by the increase in numbers at the secondary and tertiary levels would be quite enormous. Consequently, there is little chance of implementing quality improvement programmes, such as training of teachers, introducing modern teaching equipment and providing better library facilities and instructional materials. The article also points out that there is a very high rate of drop-out, and that the use of child labour is one of its prime causes, typical of poor families with many children.

Descriptors: *Educational Attainment; Literacy; Education Planning; Philippines.*

Source: ESCAP Population Division
Clearing-house and
Information Section
Rajdamnern Avenue
Bangkok-2, Thailand

DECLINING FERTILITY AIDS GOAL ATTAINMENT

Jones, Gavin. *Population growth and educational planning in developing nations.* New York, Irvington Publishers, 1975. 238 p. (A Population Council book)

Three of the twelve chapters of this book are devoted to case studies. The countries selected are Thailand, Sri Lanka and Singapore and the case studies are purposefully entitled "Thailand: the effects of rapid population growth", "Sri Lanka: the

importance of the timing of fertility decline", and "Singapore: realizing the benefits of declining fertility".

The case study of Thailand presents data to show that most of the educational expansion that has taken place can be regarded as a static expansion that has just managed to keep pace with rising numbers of children. Taking a thirty-year projection period, the author demonstrates that the benefits of a decline fertility on the attainment of educational goals would be considerable.

In Sri Lanka, where a fertility decline is under way, the author considers the effects of different patterns of fertility decline on the costs of education and the attainment of educational goals. The data conclusively show the government's savings resulting from an early, rather than a late, decline in fertility, and the consequent ease and rapidity with which educational goals can be attained.

In Singapore, the fertility decline began in 1957, and the author is able to show how it has facilitated the attainment of quantitative goals, substantially reduced educational expenditures, and also allowed more of the actual expenditure to be channelled into qualitative improvements.

The fact that rapid population growth hinders educational growth is indisputable. It raises costs, lengthens the time for attaining a set target, and results in a dilution of quality. The choice before a country is clear. It is whether the country should make a conscious effort at slowing down the rate of population growth, or ignore the problem and slow the rate at which educational goals are attained, meanwhile raising the costs involved. It is pointed out that if the choice falls on the first option as it should, the education system itself can be used to influence future population trends by including population education in school curricula and programmes of adult education.

Descriptors: *Educational Attainment; Educational Planning; Fertility Decline; Thailand; Sri-Lanka; Singapore.*

Source: Halsted Press, Division of John Wiley & Sons
605 Third Avenue
New York, N.Y. 10016
U.S.A.

NEW POLICIES TO MATCH LOWER GROWTH RATE

Lee, Sang Joo. "Demographic suggestions for educational policies in the future". In: Korean Educational Development Institute. *Population dynamics and educational planning.* Seoul, 1974, p. 207-227. In Korean with English abstract.

This article offers suggestions regarding improvements that should be effected in education in the Republic of Korea in the light of the changing demographic pattern from a high rate of population growth to a low rate. Primary school enrolments are already decreasing and nearly universal primary enrolment has been attained. In view of this the new emphasis has to be on middle school education and on qualitative improvements. The following is a summary statement of the suggestions:

1. Definite policy goals and a concrete plan for implementation should be set for making middle-school education compulsory, and for widening the opportunities for high-school education;

2. For the qualitative improvement of school education, it is necessary to develop such policies as the curtailment of class size at various school levels, the improvement of teachers' quality, and the supports to research activities for improving the effectiveness of education;

3. Policies should be actively pursued for equalizing the quality of education among regions, and for balancing the distribution of schools by regions, in order to provide equal opportunities for education;

4. As a step towards further reductions in fertility, educational facilities for women have to be expanded as well as their general educational level;

5. A comprehensive curriculum in population education should be introduced.

Descriptors: *Educational Policies, Republic of Korea.*

Source: Korean Educational Development Institute
20-1 Umyeon-Dong San,
Gangnam-Gu
Seoul 134-03
Republic of Korea

EDUCATION RESULTS IN SMALLER FAMILIES

Pareek, Udai and T. Venkateswara Rao. *A status study on population research in India, Vol. 1: Behavioural sciences.* New Delhi, Tata McGraw Hill, 1974. 161 p.

Out of 69 studies carried out in India focusing on the relationships between education and family planning knowledge and acceptance, only 11 have reported no association to exist between them. Some of the research designs were not wholly satisfactory, but after a close analysis of the results, the authors arrive at the following conclusions: (1) Contraceptive behaviour cannot be predicted only on the basis of educational level; (2) In general, education is an important variable for rapid dissemination of knowledge regarding family planning. This may also be due to greater influence of mass media on the educated than the uneducated; (3) In general, education as an important factor in influencing attitudes, and education seems to render people more receptive to new ideas and practices; (4) In general, the more educated the people, the more prone they are to accept small family norms; (5) In general, abortion and use of pills are at present more accepted by the educated; (6) In general, the educated tend to have a wider choice of contraceptive methods; (7) Educational level is not related to the use of sterilization as a method of planning. Although more illiterate women seem to accept it, both educated and illiterate women accept vasectomy.

A few studies have investigated the effect of family planning education. One study reports that the average number of children in a group of families exposed to family planning education was less than the average number of children in families not exposed to such a programme. In another study, the utility of family planning educational sessions was demonstrated by the finding that it stimulated discussion among the couples regarding the need for family planning. A third study showed that family planning education increased the acceptance and use of contraceptives.

On the basis of these research findings, it may be concluded that both education in general and family planning education in particular could contribute towards a greater sensitivity towards family size problems and modest reproductive behaviour. Quite apart, therefore, from education being of value in its own right as an index of quality of life, it may also serve the instrumental purpose of encouraging a small family norm with its implications for a better quality of life.

Descriptors: *KAP; Educational Attainment; Family Size Norms; Research Summaries; India.*

Source: Tata McGraw-Hill
Publishers Co.
C-98A South Extension
Part II
New Delhi-49, India

SAVINGS FROM EDUCATIONAL EXPENDITURES

Qureshi, M.L. "Impact of population growth on costs of primary and middle school education", *Pakistan Development Review*, 13(4): 433-451, 1974.

This article represents an attempt to estimate the impact of different rates of population growth on the costs of primary and middle school education in Pakistan in the light of the enrolment policy of the government for these two levels of education. According to the government policy, primary education (class I to class V) will be made universal for boys by 1979, and for girls by 1984. Middle school education will be made universal for boys by 1982 and for girls by 1987. The age groups concerned are 5 years to 9 years, and 10 years to 12 years.

Estimates of the number of children to be enrolled are based on three different assumptions about the rate of population growth. The first projection assumed an average growth rate of 3.0 per cent during 1975–80, 2.9 per cent for 1980–85, and 2.8 per cent for 1985-90 the second projection assumed an average growth rate of 2.83 per cent for 1975-80, 2.67 per cent for 1980-85, and 2.50 per cent for 1985-90; and, the third projection assumed an average growth rate of 2.67 per cent during 1975-80, 2.33 per cent during 1980-85, and 2.20 per cent during 1985-90. For the year 1990, the primary school-age population was 1.0 million less under the second assumption, and 2.6 million less under the third assumption, than under the first. The middle school population was less by 0.4 million and 0.8 million respectively. As far as the costs are concerned, with single-shift use of school buildings, there will be a saving of Rs. 2,480 million in the cost of providing primary and middle school education under the second assumption than the first, and of Rs. 5,508 million under the third assumption than the first. If school buildings are used for two shifts, the savings would be Rs. 1,808 million and Rs. 4,409 million respectively. From the point of view of achieving the government policy regarding the provision of primary and middle school education, there would be a substantial saving of expenditure (and hence, a substantially greater chance of achieving its goals) if the population declined according to the second assumption at least, if not the third.

Descriptors: *Education Cost; Primary Education; Secondary Education; Pakistan.*

Source: Pakistan Institute of Development Economics
Post Box No. 1091
Islambad, Pakistan

Section 6: Environment and Resources

LIMITING BIRTHS AND INDIVIDUAL CONSUMPTION

Brown, Lester R. *The Twenty-ninth day: accommodating human needs and numbers to the earth's resources.* New York, W.W. Norton, 1978. 363 p.

Fisheries, forests, grasslands and croplands are the four principal biological systems on which humanity depends. In addition to food, these biological systems provide virtually all the raw materials for industry, except minerals and petroleum-derived synthetics. The oceanic food chain, yielding some 70 million tons of fish per year, is man's principal source of high quality protein. Apart from direct consumption, certain species of fish are converted into fish meal for feeding poultry, which in turn provide meat and eggs. Forests provide timber for housing firewood for fuel, and are also the source of paper, serving man's educational, informational and other transactional needs. Grasslands support animals which provide meat, milk and milk products. Certain animals supported by grasslands are also the source of wool for clothing, and leather for footwear. Croplands provide food, fibre, and industrial raw materials.

As population expands, the demands for all of these necessities of life increase, straining to the maximum the carrying capacity of these biological systems. Overutilization or over-exploitation of any one of the systems carries with it its own hazards for the future. Population growth also calls for the conversion of existing grasslands and croplands to such uses as building construction, transportation and recreation, thereby reducing the quantum available for the purposes mentioned above. Forest lands have also to be gradually cleared and put to other uses, with the inevitable repercussions on all fertility and growing in magnitude. To cap these all, there is an energy crisis of unprecedented dimensions.

The essential choice before man is whether to limit births and individual consumption so as to avoid excessive pressure on the biological systems or to risk a catastrophic breakdown. The time is now to develop a new accommodation ethic directed towards scaling human wants and numbers of the earth's resources and capabilities. Such an ethic will affect many dimensions of human existence: life-styles, land ownership patterns, economic structures, family size, international relations, and the educational system, but comfort can be had in the thought that it would raise man to a higher level of humanity than he is at present.

Descriptors: *Natural Resources.*

Source: W.W. Norton & Company
500 Fifth Avenue
New York, N.Y. 10036
U.S.A.

POPULATION GROWTH: ENVIRONMENTAL DECLINE

Luna, Jr., Teleforo W. "The environmental impact of population pressure: examples from agriculture and urbanization". In: Bulatao, Rudolfo A., ed. *Philippines population research: papers and proceedings of an experts' meeting.* Manila, 1976, p. 497-512.

Quality of life: population education

With population growing at an exponential rate, man's demands and his use of the physical environment have expanded. Population increase has given rise to the need for the production of more and more food. The technologies used to increase agricultural productivity are full of environmental hazards, and also disturb the ecological system. The accumulation of organic wastes, pesticides and fertilizers associated with modern agricultural systems is tremendous. Man does not have the technology to dispose them at the rate they are produced, and consequently their disposal is left primarily to natural processes, and is dependent on the capacity of the environment to absorb, degrade, and recycle waste materials. The fossil-fuel energy used is often substantially greater than the energy yield in the food produced, and is a non-renewable resource. All of these features point to the fact that in considering modern agricultural systems one must look not only to the direct economic costs and benefits, but also to the long term repercussions of the strategies employed to achieve high productivity. The writer relates these considerations to the particular case of Mindanao, where population growth is applying pressure to increase crop cultivation, with the great danger of an accelerated deterioration of the environment. The most that safeguards can do is not to eliminate environmental destruction but to reduce the rate of such destruction to tolerable levels.

Urbanization is another phenomenon that is generating immense problems of environmental degradation. The city has become a vast source of contaminants that are the by-products of the daily activities but also the transportation system. Manila is an example of a city that has been adversely affected.

The writer argues the case for multidisciplinary environmental research focusing on modern agricultural systems as well as on the phenomenon of urbanization, since the present state of knowledge regarding their impact on the environment is inadequate. He also advocates a unified, international approach to the solution of environmental problems. At the same time, it has to be recognized that a slowing down of the rate of population growth is an indispensable precondition for the improvement of the relationship between man and his environment.

Descriptors: *Environment; Urbanization; Agricultural Development; Philippines.*

Source: Population Center Foundation
Population Information Division
P.O. Box 2065
Makati Commercial Center
Manila, Philippines

DEVELOPMENT VS. THE ENVIRONMENT

Ramana, D.V. *An overview of environment and development: Asia and the Pacific.* Bangkok, United Nations Asian and Pacific Centre for Women and Development, 1980. 325 p.

This book points out that the impact of population on environment is governed by two sets of factors, namely the demographic characteristics of the population and its patterns of living. "The existing size of population and its rate of growth partially determine the extent and intensity of exploitation of natural resource endow-

ments. The level of income and its growth rate, the composition of the goods and services produced in the course of generating income, the choice of technology for their production, the framework of attitudes and institutions (political, economic, social, and cultural) prevailing in a society and their evolution in time – which are all components of the patterns of living – also determine the magnitude of resource exploitation." The thesis of the book is that trends both in regard to population and to consumption are disconcerting, but that trends are not destiny and that they can be shaped to yield less harsh results.

The book in four parts, entitled as follows: Part I - Population and structure of production with focus on inequality, poverty and unemployment; Part II - Productive resources; Part III - Pollution; Part IV - Shaping the trends.

While the book itself suggests the broad outlines of a strategy of development that would halt the degradation of both man and environment and work towards achieving a better quality of life, its purpose is to encourage an assiduous search for a variety of strategies geared to the satisfaction of basic human needs and the enhancement of quality of life.

Descriptors: *Natural Reosurces; Environment; Pollution.*

Source: United Nations Asian and Pacific Development Centre
Pesiaran Duta
P.O. Box 2224
Kuala Lumpur
Malaysia

WATER – AN ESSENTIAL REQUIREMENT FOR AGRICULTURE, FISHERIES AND INDUSTRY

Sokolov, A.A. "World water resources: perspectives and problems". In: Sinha, Radha, ed. *The world food problem: consensus and conflict.* London, Pergamon Press, 1978, p. 519-523.

With the increase of population, the demand for water has grown as, apart from its use for drinking and washing, water is an essential requirement for agriculture, fisheries and industry. While there may be general awareness of the need for water in connection with agriculture and fisheries, the importance of water for industry is not widely appreciated. The article presents data to show that no branch of industry can be developed without water. Together with the increase in water consumption for domestic, agricultural and industrial purposes to meet the demands of the growing population, there is a progressive increase in the discharge of waste into lakes, rivers, seas and the ground, leading to pollution that is damaging to health. There is thus a quantitative and qualitative depletion of water resources that demands attention, nationally and internationally. The water exchange process, by which water that is discharged into seas and oceans comes back purified and recycled, does not take place without loss, and a situation may be envisaged in the long run when there would be a disturbance in the existing distribution of water between land and ocean. It has also to be remembered that the quantity recovered may be unevenly spread over the earth, and that even now some countries receive barely adequate supplies. For the world as a whole, there may not be a threat of serious depletion within the next century or so, but the prospect

beyond causes concern, and calls for attention from now onwards. Prevention of irretrievable water losses, control of water consumption, introduction of waterless technological processes, prevention of water pollution, and a search for methods of water re-use are important measures to which scientists and engineers should direct their efforts, nationally and internationally. Widespread awareness of these issues on the part of the public would be a great asset in prudent water management. In particular, an educational programme is needed to change the view of rivers as the last linkage in a sewage system.

Descriptors: *Water Resources.*

Source: Pergamon Press Ltd.
Headington Hill Hall
Oxford OX3 OBW
England

Section 7: Migration, Urbanization, Human Settlements and Housing.

BUILDING LIVABLE LOCALITIES

HCM State Institute of Public Administration. [*Documentation and report of the*] *Human Settlements Management Training Seminar, Jaipur, 1-14 December 1976.* Jaipur (India), 1976. 1 vol. (various papers).

This is a report of a seminar organized jointly by Unesco and UNEP emphasizing the importance of training for the management of human settlements, and highlighting the issues on which such training should be focused. The basic assumptions were that human settlements management training would result in sensitizing the persons involved to the importance of taking action to improve quality of life in existing settlements, and in planning new settlements with due regard to quality of life considerations. Human settlements were looked at from a number of dimensions such as the socio-cultural, physical, environmental (divided into the natural environment and the regional as well as national settings), and management. Stress was placed on the identification and understanding of problems, and the implementation of action programmes.

Among the articles included in the report, one entitled: "Slum clearance in Jaipur: policies, problems and priorities" is of special interest. The conditions in the Jaipur slums were no different from those in other urban slums. The task of converting the slums into more livable localities was made the responsibility of an Urban Improvement Trust. Planned development took the form of the provision of the following facilities: 1) roads; 2) public 'stand posts' for drinking water; 3) street lights; 4) drainage system; 5) parks and other public utilities; 6) allotment of equal size plots, and 7) the construction of houses. The formation of co-operative housing societies was encouraged, and arrangements were made for loans to be available from the Rajasthan State Co-operative Housing Finance Society Ltd. The weaker sections of the population such as the scheduled castes and tribes were given special grants. Some of the problems encountered were: uprooting the 'surplus' population, removing illegal occupancy, acquiring private lands, and the absence of relevant legislation in these respects. The conclusion of the case study is that a permanent solution to the problem of slum development requires a scheme of priorities. They were categorized into: (1) Short-term or immediate needs such as the supply of drinking water, electricity, access roads and provision for sanitation; (2) Second order priority needs such as community facilities, schools, health centres, public parks and transport facilities; (3) Long-term needs such as action to slow down the process of in-migration, improving urban-rural balance, and providing employment, specially by extending loan facilities for setting up small scale industries.

A diversity of training methods e.g. lectures, panel discussions, guided discussions, field trips, simulation games, and library readings was used in the seminar. Feedback showed that the participants had derived great benefit from the seminar.

Descriptors: *Human Settlement; Urban Development; Housing; India.*

Source: HCM State Institute of Public Administration
Jaipur – 302004, Rajasthan
India.

URBAN MIGRANTS IN THREE CAPITALS

Mowat, Suzanne. *Education and the urban migrant; a comparative analysis of case studies in Bangkok, Manila and Jakarta.* Bangkok, Unesco Regional Office for Education in Asia, 1977. 112 p.

The author provides a comparative analysis of case studies of migration into three South-east Asian capitals, namely Bangkok, Manila and Jakarta. By far the most important chapter in the publication is that entitled "Principles for action", delineating what may be done to improve the quality of life of migrants, considering that attempts so far made to arrest migration have not met with conspicuous success.

There is need for a large information component, as the migrants' lack of information not only extends into many areas of the migrants' relationship with the urban world but is also responsible for less than total utilization of existing facilities and programmes. Suggested information is about housing possibilities, including the rights of squatters, different rates that may be paid for water or electricity, job opportunities in various areas of the city, including the hours of work and the pay to be expected, unemployment or sickness or accident benefits, availability of public health or family planning facilities, availability of vocational or retraining programmes, and financial assistance to make participation possible. The provision of information booths is recommended for this purpose.

In view of the fact that the percentage of female migrants is greater than has been generally thought, it is suggested that special programmes, relevant to the occupations they usually take up, should be organized. Domestic service is a common occupation, and it is presumably learned on the job. However, information about rights and duties may be useful. Service industries also absorb quite a number of women in employment. There are as yet unavailable needs and opportunities in this field. For example, child-minding to be undertaken in day-care centres, for which a great need exists, is a possibility. Also, in the case of relatively better educated migrant women, training opportunities for working in community kindergartens, for which there is an urgent need in urban areas in which the parents have to go out to work, are an avenue to be explored.

Attention should be paid to the stimulation of various forms of cottage industry to be carried out in the home or small work-places not far from home to generate income. Government loans of modest proportions should be available to those who need a small amount of capital to start cottage industries.

The provision of child-care arrangements and due publicity regarding their availability should be especially useful. More women will seek work outside the home if such facilities are available.

Urban community development schemes focusing especially on migrant groups are greatly to be desired. Besides seeing to the provision of previously lacking services in such areas, they should be directed towards creating a feeling of community as a safeguard against alienation.

Services such as those suggested above should help in promoting the adjustment of migrants, and in increasing their contribution to urban life.

Descriptors: *Migration; Migrants; Socio-economic Factors; Education. Indonesia; Philippines; Thailand.*

Source: Unesco Regional Office for Education in Asia and the Pacific.
Population Education Clearing House
P.O. Box 1425, Bangkok, G.P.O.
Bangkok, Thailand.

MIGRANTS' ADJUSTMENT TO CITIES

Penporn Tirasawat. *Urbanization and migrant adjustment in Thailand.* A report of research undertaken with the assistance of an award from SEAPRAP. Singapore, Southeast Asia Population Research Award (SEAPRAP), International Development Research Centre, 1977. 55 p. (SEAPRAP research report no. 10)

The purpose of this study was to investigate the adjustment in migrants to the urban way of life. The study used data gathered during the course of the National Longitudinal Study of Social, Economic, and Demographic Change in Thailand, conducted by the Institute of Population Studies at Chulalongkorn University. It, however, confined itself to make household heads, who had been interviewed in the longitudinal study. These household heads included migrants to Bangkok and other urban centres, as well as persons born in Bangkok and the other cities.

Three hypotheses were stated and tested. The first hypothesis, which stated that adjustment would be greater for migrants with longer exposure to an urban way of life in the place of destination, was not fully supported. Only the data for urban origin migrants to greater Bangkok supported this hypothesis on some variables, the exceptions being educational attainment, housing facilities, and age at first marriage. For the rural migrants to the capital, only two variables reflecting the economic dimension (occupation and modern item possessions) showed the hypothesized pattern of adjustment. For the social and physical dimensions, migrants with shorter exposure (less than 15 years of residence) appeared to be better adjusted than those who arrived earlier. None of the variables examined showed the expected pattern of adjustment for migrants to provincial urban centres. The data lent firm support to the second hypothesis that urban origin migrants adjust more fully to the way of life at the destination than migrants from rural areas. The third hypothesis stated that migrants to smaller urban places would adjust more fully than migrants to Bangkok. With the exception of one variable reflecting the physical dimension (source of water), the data for the short exposure migrants lent firm support to the hypothesis. Recent migrants (less than five years of residence) to smaller urban centres resembled the urban born more closely or exceeded them at a greater rate than their counterparts in the primate city. But for most variables, the data for the longer-term migrants did not support the hypothesized pattern. In brief, the main conclusion suggested is that adjustment proceeds most steadily and rapidly with respect to the economic dimension, and that adjustment along other dimensions is a more complicated process.

The lines along which the study sees a solution to the problem of urbanization are in reducing the wide social and economic gaps between urban and rural areas, and between the capital city and both smaller urban places and the rural areas through the development of rural areas and regional urban centres.

Quality of life: population education

Descriptors: *Migrants; Urbanization; Socio-economic Factors; Thailand.*

Source; Southeast Asia Population Research Awards Program (SEAPRAP)
International Development Research Centre
Tanglin P.O. Box 101
Singapore 10

WHAT'S HAPPENING TO CITIES?

People. Special issue on human settlements. Vol. 3, No. 2. 1975. 50 p.

This issue of *People* deals with human settlements. It has two major sections, dealing with cities and rural areas respectively. In the section on cities, there is a general article entitled "Can the cities cope?" followed by pen-portraits of 1) Dacca, the capital of Bangladesh, 2) Netzalhualcoytl, and urban satellite on the edge of Mexico City and 3) Lagos, the capital of Nigeria. The article points out that the rush from rural areas since the Second World War is not related to the growth of industrial employment in developing countries.

Although the manufacturing sector in the Third World is growing rapidly, it is capital- rather than labour-intensive, and creates only a small number of jobs. The massive transfers of population from rural areas to cities take place, not because jobs in the cities beckon the people, but because the expansion of agricultural employment is falling far behind rapid population growth. When agriculture is modernized, pushing up yields and replacing hands with machines, peasants are pushed off the land. Nor can traditional agricultural absorb the fast increasing rural youth in employment.

The article cites data and projections showing that with two exceptions (Japan and Western Europe), the major sub-regions of the world, as classified by the Population Division of the United Nations, will add larger number to their urban populations during the quarter 1975 to 2000 than during the preceding quarter 1950 to 1975. In most sub-regions the percentage increase exceeds 100, and in a few it exceeds 200 and 300.

The article points out that in the cities it is the informal economic sector as exemplified in the distributive trades, transport and personal services, small-scale manufacturing, technical maintenance and repairs, and construction that has generated employment and reduced the percentage of unemployed urban dwellers. It argues that the formal sector- modern economic activities planned by the state or organized by large corporations has proved to be an expensive investment. It urges that instead of harassing or ignoring the informal sector, urban authorities should bring it into the planning process with loans, seed money, and matching grants backed by technical assistance and modest infrastructure of all.

The article on Dacca concludes with a statement by a government official that if the rural population continues to drift to Dacca, it could become one of the world's worst slums. The article on Netzalhualcoytl points out that attempts to slow city growth by persuading industry to establish itself on the outskirts has produced " a series of satellite monsterettes, low-income faceless cities and towns". The moral is that the satellite town must be carefully planned with due regard to issues of employment, environment etc. if it is not to replicate the problems of the city. Lagos is Africa's fastest growing city, and is replete with all the problems associated with overcrowding.

The major article in the section on the rural dimension emphasizes the need for a deliberate policy of reversing the bias which prevails in favour of urban investment, and argues the case for more investment in the rural sector with emphasis on increasing agricultural productivity, and providing better health, sanitation and educational services.

The importance of reducing family size and slowing population growth is stressed as one of the most urgent measures that should be taken to facilitate the improvement of quality of life in both cities and rural areas.

Descriptors: *Human Settlement; Urban Growth; Bangladesh.*

Source: People
International Planned Parenthood Federation
18-20 Lower Regent Street
London SW1 4PW, England

STOCKHOLM: THE HUMAN ENVIRONMENT

United Nations. Centre for Housing, Building and Planning. *Human settlements: the environmental challenge.* London, Macmillan Press, 1974. 209 p.

This book contains the United Nations papers prepared for the Stockholm Conference on the Human Environment, 1972, the recommendations for policy and action made by the Conference, and the resolutions adopted by the United Nations General Assembly.

Unprecedented population growth, industrialization pursued almost as an end itself and unregulated urbanization have brought the man made environment and natural environments into conflict to such a degree that not only is sound economic and social development endangered, but also the physical, social, aesthetic, and spiritual well-being of man is jeopardized. The United Nations Conference brought together leading scientists and statesmen from the developing as well as the industrialized countries, and they recommended course of action to be taken in the face of the challenge. In regard to development countries, it was recognized that the rate of population growth and the scale of urbanization were of unprecedented dimensions. In the case of urbanization, unlike urban growth in most of the developed world, the growth of large cities in developing countries is preceding the economic growth necessary to sustain large urban conglomerations. Urbanization is increasing at a faster pace than industrialization, and is characterised by unemployment, underemployment and poverty. Another respect in which the growth of cities in developing countries is different from that the developed world is that agriculture has not produced the food surplus which predated urban growth in the developed world.

It is only by a process of comprehensive planning of human settlements that the problems arising in both types of countries, the industrialized and the developing, can be solved in such a way as to minimize the further degradation of the environment.

The declaration on the human environment made at the close of the conference strikes both cautionary as well as optimistic notes. To quote a few lines, "Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend. Conversely, through fuller knowledge and wiser action, we can

achieve for ourselves and our posterity a better life in an environment more in keeping with human needs and hopes. There are broad vistas for the enhancement of environmental quality and the creation of a good life. What is needed is an enthusiastic but calm state of mind and intense but orderly work. For the purpose of attaining freedom in the world of nature, man must use knowledge to build in collaboration with nature, a better environment". The Conference called upon governments and peoples to exert common efforts for the preservation and improvement of the human environment, for the benefit of all the people and for their posterity. The Conference stated 26 principles, and made 18 recommendations all of which are reproduced in the book, along with the resolutions which the United Nations General Assembly subsequently passed.

Descriptors: *Urbanization; Human Settlement.*

Source: Macmillan Publishers Ltd.
Little Essex Street
London WC2R 3LF
United Kingdom

Section 8: Labour, Manpower Employment

POPULATION GROWTH AND EMPLOYMENT

International Labour Office. Regional Office for Asia and the Pacific. *Report and background papers [of the] Seminar on Population, Employment and Development in ASEAN Countries, Bangkok, 6-9 December 1978.* Bangkok, 1979. 1 vol. (various pages).

The need for integrating population and employment planning was highlighted by the ILO World Employment Conference, Geneva, 1976. Consequent upon it, countries in the ASEAN region, as elsewhere, were encouraged to hold seminars to identify and analyse the implications of population growth on employment in the context of national development planning, and to identify areas for further work in population and employment policy and research. These seminars demonstrated that the ASEAN countries have problems of common concern which could be discussed within a single forum with a view to the formulation of future action programmes. It was in this context that the Seminar was organized as its specific objectives were: (a) to analyse the impact of future population and labour force increases on the employment situation in the context of development planning; (b) to examine the inter-relationships between population, the structure and growth of employment and income distribution, with emphasis given to the demographic consequences of labour market and income policies; these include policies affecting regional income and employment differentials and their consequences for migration, and the role and status of women in relation to fertility; (c) to identify priority areas of research for developing an inter-country programme of studies on population and employment, and recommend steps for necessary action in individual countries.

Thirty participants from Indonesia, Malaysia, the Philippines, Singapore and Thailand attended the Seminar, and there were also observers from U.N. agencies. Apart from the papers prepared by national participants, three background papers with the titles: "A survey of research on population and employment under ILO's World Employment Programme", "The demographic consequences of employment and income distribution", and "Population and employment planning some substantive operational aspects" were available for discussion. All the papers are reproduced in the report.

The report also summarizes the conclusions and recommendations of the Seminar under the three main headings: I. Population and employment planning - a framework; II. Population, migration and employment - policy issues; III. Labour force, income distribution and fertility.

A reading of three conclusions and recommendations shows that they are of relevance not only for the ASEAN countries but also for other Asian countries.

Descriptors: *Employment; Human Resources Development; Fertility Behaviour; Asia.*

Source: ILO Regional Office for Asia and the Pacific
P O. Box 1759
Bangkok, Thailand

EMPLOYMENT AND POPULATION PLANNING

Turnham, David and Ingelies Jaeger. *The employment problem in less developed countries; a review of evidence.* Paris, Organization for Economic Co-operation and Development, 1971. 154 p. (Development Centre Studies Employment Series No. 1).

The author discusses what he terms "disquieting trends" in developing countries:

1. *Growth in labour force.* The current and prospective growth in the labour force is massive by the standards of world history, and in comparison with the sorts of increases being experienced in the now developed countries. Any lowering of birth rates now would not begin to affect the number of new entrants to the labour force until some 12 to 15 years later.

2. *Employment prospects.* Faced with an increase of unprecedented magnitude in the demand for work, it is clear that the growth of jobs in the modern sector, especially the core sectors manufacturing and public utility infrastructure, will be quite insufficient to match present and prospective requirements.

3. *Income distribution.* A considerable number of potential entrants to the modern sector have, of necessity, been absorbed into stagnant or slow growing sectors – into traditional agriculture and handicraft manufactures and into low productivity service activities. Consequently, large groups of workers have experienced little or no improvement in standard of living during the recent development period.

4. *Unemployment.* A very high level of unemployment already exists among young people, and for an increasing number of countries, employment is emerging as a more serious problem than the adequacy of food supplies.

5. *Urbanization.* Urban areas in many developing countries are growing twice as fast as the population as a whole. The great mass of migrants creates demands for employment that are almost impossible to meet, and at the same time places a severe strain on urban services, thereby greatly depleting the budget for development.

The five considerations summarized above made it imperative that the creation of employment should be a priority issue in development planning. Policies of industrialization need re-assessment as to whether they should not become less capital intensive and more labour intensive. Less emphasis on industry and more on agriculture might yield better results in terms of both output growth and employment growth. Measures should also be taken to reduce problems of income inequality. Action needs to be taken to slow down the rate of population growth so that the problem of unemployment may not get compounded.

Descriptors: *Labour Force; Unemployment; Income Distribution; Nutrition; Developing Countries.*

Source: OECD Publications
2 rue André-Pascal
75775 Paris, Cedex 16
France

POPULATION AND MANPOWER PLANNING

United Nations. Economic Commission for Asia and the Far East. *Interrelation between population and manpower problems.* Report and selected papers of a Joint ECAFE/ILO Seminar held in Bangkok, 18-30 January 1971. Bangkok, 1972. 123 p. (Asian population studies series no. 7).

Thirty nine participants from twenty countries took part in the seminar, along with representatives of United Nations and other international agencies. The principal recommendations regarding population and manpower policies were as follows:

1. Manpower and population policies were essential components in national, regional and international goals, plans and programmes. Population policies should be comphrensive and should cover such items as rates of population growth; regional and other changes in population distribution; internal and international migration; the structure of population; and characteristics significantly related to population quality as well as growth.

2. Manpower policies should likewise be comprehensive and should cover the composition, characteristics, and distribution of the labour force; the dynamics of supply and demand at national and regional levels and their relation to characteristics and skills; and the deployment and utilization of the labour force.

3. Flexibility and continuing adjustments in manpower policies and goals were required in the current period of rapid population growth, basic transformations in agriculture, and insufficiencies in skills and employment.

4. Population and manpower policies could involve inconsistencies or even conflicts in such areas of change and development as education, health, the role of women, the family, fertility, income distribution and economic growth. Where conflicts existed, their resolution should take into account long-run implications of short-term solutions.

5. As population and manpower dynamics were not spheres apart but concerned the human aspects of development, the impact of other policies, plans, programmes and sectoral changes on them should be the subject of continuing assessment, analysis and evaluation. The relative feasibility, efficiency and consistency of direct and indirect policies in the short and the long run should likewise receive continuing attention.

Descriptors: *Employment Policy; Labour Force; Socio-economic Development; Asia.*

Source: ESCAP Population Division
Clearing-house and Information Section
Rajdamnern Avenue
Bangkok-2, Thailand

Section 9: Values, Religion, Ethics, Psychological Factors, Laws.

CLOTHING AND SELF-IMAGE

American Home Economics Association. ***Home economics and family planning.*** Resources papers for curriculum development, p. 63-67 ***(Creating an awareness of population concerns through extiles and clothing,*** by Mignon Perry), p. 68-76 ***(Clothing: a visual reflector of the quality of man's life,*** by Eleanor A. Kelley).

These two papers show the potential for including "clothing" as a theme for introducing the concept of quality versus quantity in relation to family size. While home economics is generally regarded as a subject of study for girls only, the content of these papers is such that the theme is as appropriate for inclusion in a course for boys as for girls. Clothing is a highly visible symbol fulfilling, *inter alia,* the basic psychological need every one has for acceptance by one's peers and other reference groups. Clothing that is below acceptable standards can hinder the development of an adequate self-image, affecting behaviour along several psychological dimensions. While lack of acceptance of a child on the part of his or her peers may be due to inappropriate clothing, there is the danger that the child may attribute it to undesirable characteristics which the child imagines he or she has, thereby developing a negative self-image that could lead to quite harmful consequences.

Apart from the visibility dimension, the psychological hazard referred to makes clothing very important from the point of view of quality of life, inasmuch as harmonious personality development is an essential element in quality of life. One of the papers also cites a research study, the finding from which was that five out of six drop-outs expressed lack of satisfaction with clothing. Considering that a lower education generally results in less lucrative employment, not only would the drop-outs personally experience a lower quality of life themselves, but would also tend to perpetuate a similar life style for their offspring. The financial burden on a family with many children for whom appropriate clothing has to be provided is obvious, and highlights quite realistically the issue of quality *versus* quantity. Even when minimum standards have been met, the desire for better clothing, arising from changes in fashions or other causes, can give rise to a concern for quality as against quantity, and such concern may be neglected in reproductive behaviour. The two articles together provide useful insights for dealing with at least three issues in the main: (a) how clothing functions for human beings in their social settings, (b) how clothing lends itself to a discussion of family quality versus quantity, and (c) how a curriculum can integrate clothing concepts with population concepts.

Descriptors: *Clothing; Social Values.*

Source: American Home Economics Association
International Family Planning Project
2010 Massachusetts Avenue N.W.
Washington, D.C. 20036
U.S.A.

WHY PEOPLE WANT CHILDREN

Bulatao, Rodolfo A. "Values, attitudes and the desire for children". In: Bulatao, Rudolfo A. *Philippine population research: papers and proceedings of an experts' meeting*. Manila, Population Center Foundation, 1976, p. 275-305.

A questionnaire was administered to a sample of Filipinos, consisting of relatively young married couples (wife below 35 years and husband below 45 years) with at least one child, roughly distributed equally among three socio-economic groups, namely the urban middle class, the urban lower class, and rural residents.

The responses to the question: "What would you say are some of the good things or advantages of having children compared with not having children?" provided a relatively direct answer to the values attached to children by parents. The two most frequently given advantages, mentioned by more than half of each socio-economic group, were the happiness children bring into their parent's life or into the home and the care, guidance, and financial security they provide for old age. The urban middle-class sample stressed happiness somewhat more than assistance, and rural residents stressed old-age assistance more. The next two advantages, each mentioned by more than a third of the respondents, were both utilitarian: practical help from children in housework, in running errands, in watching over the house: and economic assistance, help in earning a living or when parents are in need. Both these values were more important for rural residents.

A parallel question probed for the disadvantages of having children. Financial problems were ranked most important in each of the three socio-economic groups. Following this disvalue were three categories of responses having to do with problems connected with child-rearing: disciplinary problems were the first of these, the responsibility and worry of child care, including child health in particular, was second, and general anxieties about children was third.

Besides the open-ended questions referred to, value attached to children were ascertained through a Likert scale. The five items which received strongest endorsement were: (1) Having children around makes a stronger bond between husband and wife; (2) One of the best things about being a parent is the chance to teach children what they should do and what they should not do; (3) One of the highest purposes of life is to have children; (4) It is only natural that a man should want children; (5) A person who has been a good parent can feel completely satisfied with his achievements in life.

It will be noted that no value similar to these was among the most frequently mentioned advantages. A conclusion that may be arrived at from this kind of inconsistency is that there may be different types of values, or that value may have different aspects that reveal themselves from different perspectives.

Descriptors: *Value of Children; Research*

Source: Population Center Foundation
Population Information Division
P.O. Box 2065, Makati, Commercial Center
Makati, Philippines

ETHICS AND POPULATION

Hunter, Helen J. *Ethical issues of population policy in social service practice; discussion outline and summarized references.* Ann Arbor, Social Work Education and Population Planning Project, University of Michigan, 1976. 69 p. (Study aids for social work education).

This publication is primarily intended for social work educators to be used in discussing population factors with trainees in social work. Ethical issues related to population factors are equally relevant to population educators, and from this point of view the publication merits the close attention of those involved in population education.

Inter-relationships between population education and ethical issues are a matter for concern in two major respects. In the first place, the content of courses in population education and the methods of instruction should be ethically defensible. Secondly, a course in population education cannot but consider the population policies and programmes in operation in the country concerned, and these policies and programmes have ethical dimensions which are a legitimate concern of those engaged in population education.

The summarized references in this publication deal with several aspects of population ethics. First, some basic information about the subject matter of ethics is included. Following that, some specific issues are emphasized, such as the central values of freedom, justice and security, survival. Human rights and duties, and self-determination are carefully discussed, particular attention being paid to what is entailed in the reaffirmation by the United Nations of family planning a fundamental human right. Several ethical dilemmas arising from conflicting values are also discussed. These include individual rights versus collective rights, the achievement of equal justice, freedom versus coercion; human (or species) survival versus survival of peoples (genocide concerns); the ethics of social and economic incentives. A final section discusses criteria for decision-making about the ethical acceptability of population policies.

Descriptors: *Ethics; Social Values, Literature Reviews.*

Source: Social Work Education and Population Planning Project
School of Social Work
University of Michigan
Ann Arbor, Michigan 48109
U.S.A.

ISLAM AND FAMILY PLANNING

International Planned Parenthood Federation. Middle East and North Africa Region. *Islam and family planning.* A faithful translation of the Arabic edition of the proceedings of the International Islamic Conference held in Rabat (Morocco), December 1971. Beirut (Lebanon), 1974. 2 vols.

These two volumes contain the proceedings of a conference held in Rabat, Morocco in December 1971. It was attended by 69 participants from 23 different countries, and they included scholars in the fields of Islamic jurisprudence, medicine, sociology and demography. The papers read by them as well as the discussions are reproduced in English translation in the two volumes.

The conviction was strongly expressed that the teachings of Islam a) guarantee to

the family complete happiness and the assurance of maintaining its integrity; and b) guarantee a nucleus of the Islamic community of peoples, strong and secure.

Taking into consideration the teachings of Islam on the one hand, and the problems posed by large families and rapid population growth on the other hand, the conference was of the opinion that:

1. Islamic Law with its rules about the family adequately provides for its being cared of, and for its safety, and the regulation of its affairs in such a way as not to leave room for disintegration or infirmity to affect its structure.

2. Islamic law through its provisions, whether recorded in the Quran or in the traditions or inferred from other recorded provisions through the method of ijtihad (individual discretion) ensures that the Muslim family will be able to tackle successfully any new situation and have it under control, with correct and sound solutions and measures.

3. Islamic Law allows the Muslim family to be able to look after itself as regards the procreation of children, whether this is in the sense of having many or having few of them. It also gives it the right to deal with sterility and to arrange suitably spaced out pregnancies, and to have recourse to safe and legitimate medical means.

On the subject of sterilization, the conference was of the view that the use of means which may lead to sterility is not allowed by Islamic law either to married couples or to anyone else. In regard to abortion, it was agreed that is should be forbidden after the fourth month of pregnancy, unless it is absolutely necessary for saving the mother's life or in the case of there being no hope for the life of the foetus.

Descriptors: *Islam; Family Planning*

Source: IPPF Middle East and North Africa Region
P.O. Box 1567
Beirut, Lebanon.

SRI LANKA: LAW AND LIVING

Jayasuriya, J.C. *Law, socio-economic development and quality of life in Sri Lanka.* Colombo. Environmental and Population Law Committee, Family Planning Association of Sri Lanka, 1978. 315 p.

Starting with the two premisses 1) that the goals of development are basically the enhancement of the dignity of human beings, and the progressive improvement of quality of life in all its facets, including most importantly the social, economic, cultural, moral and aesthetic dimensions, and 2) that the laws of a country bear on all these dimensions of development, the author subjects to a close scrutiny the laws of Sri Lanka as they bear on the various dimensions enumerated by him.

Considering that the evolution of the laws of the country has taken place over a long period of time, it is natural that it has happened in a piecemeal fashion and not in a closely co-ordinated and coherent manner. In the circumstances, laws need to be examined in terms of a unifying perspective, and among various perspectives, the author chooses his perspective from the goals of development as indicated above.

Quality of life: population education

The author proceeds to examine the laws of Sri Lanka as they bear on 30 topics, among which the most significant from the point of view of quality of life are the following: public order and safety, civil and human rights, property rights, ecology, land use and urban planning, transportations, commerce and business organization, labour, agriculture, natural resources and energy, industry, service occupations, education, public health, public welfare, family status, children and child welfare, fertility regulation, and recreation. The relevant legislation is examined critically from the point of view of its adequacy for promoting quality of life in the context of present-day Sri Lanka. The author finds the legislation inadequate in many respects, and urges that a multi-disciplinary team consisting of lawyers, sociologists, economists and demographers should examine the legislation to determine which laws should remain as they are, and which should be re-drafted so as to make them an instrument of national development. He argues that while legislation is no panacea for the problems and challenges faced by a developing country, suitably framed legislation's necessary as one of the inputs that must be integrated into the development process so as to optimize the results of development. The exercise which the author has carried out for Sri Lanka is important and relevant, and one that needs replication in other countries as well, if they have a serious concern for quality of life as a goal of development.

Descriptors: *Law; Socio-economic Development; Sri Lanka.*

Source: Environmental and Population Law Committee
Family Planning Association of Sri Lanka
Bullers Lane
Colombo-7, Sri Lanka

STRESS FROM POPULATION GROWTH

Levi, Lennart and Lars Andersson. *Psychosocial stress: population, environment and quality of life.* New York, SP Books, 1975. 142 p.

This book is concerned with the health and well-being of man in an age characterized by poverty and famine, unprecedented increases in population, energy needs and energy consumption, and environmental pollution. It focuses specially on psychological stress due to deprivation or excess of sensory input arising from changes in population density, consequent upon the phenomenal increase in population size and volume of migration. From the point of view of psychological stress, three high risk groups are identified. They are young people under 15 years of age, elderly persons over 60 years of age, and the physically, mentally or socially handicapped. The authors use the phrase socially handicapped to refer to those dependent on drugs or alcohol. The stimuli generated by population structures and processes can affect all human beings, but their impact on the high risk groups is particularly adverse. Environmental characteristics serve as mediating variables, promoting or counteracting human well-being in complex interaction with population variables, critical among which are levels and changes of population density. The facets of the environment that are identified for discussion are: 1) urban and rural environments; 2) industrial environments; 3) economic factors; 4) employment; 5) family-related cultural and social factors; 6) nutrition; and 7) the physical environment. Apart from psychological stress, the discussion focuses on various other aspects of quality of life. In fact, one section in the book offers a useful analysis of the concept of quality of life.

It gives an account of an early (1961) United Nations concept of level of living, followed by a modification suggested by a Swedish Scholar, and finally relies on an OECD (1973) formulation in which eight major "goal areas" were identified. These goal areas are: 1) health; 2) individual development through learning; 3) employment and quality of working life; 4) time and leisure; 5) command over goods and services; 6) physical environment; 7) personal safety and administration of justice; and 8) social opportunity and participation. Within these eight goal areas, twenty-four fundamental social concerns are identified. The effects of high, low, increasing, and decreasing population density, and migration interacting with the environmental facets referred to earlier are evaluated in terms of quality of life. Research findings are quoted from an extensive number of sources, and a comprehensive bibliography is provided. The book concludes with the following key points and recommendations: (1) By all possible standards, the level of living of many hundreds of millions of people is so low (below subsistence) that their quality of life is bound to be intolerable; (2) To improve conditions by raising the level of living for these underprivileged must be a top priority task for the international community; (3) Simultaneously, we need world-wide strategies to modify or change present accelerating trends toward population explosion, overurbanization, malnutrition, underemployment, poverty, environmental pollution, "planet eating", illiteracy and inequality. (4) These tasks can never by achieved by one or another of the specialized strategies. These strategies should be integrated into a co-ordinated world plan of action; (5) For this purpose the psychosocial factor of motivating all people to a common global purpose is as important as a world plan and material resources; (6) Motivation is needed both for those who will give and those who will benefit; (7) A rise in level of living alone is not enough. Quality of life must also be taken into consideration. This means that an increased emphasis must be put in social policy on psychosocial aspects, and on reformation on societal goals; (8) Whatever may be the intentions, the outcome of separate or integrated world plans can never be predicted with certainty. To safeguard those concerned, we need continuous monitoring and evaluation to keep us on the course. This evaluation must be concerned with total man in his interaction with total environment. It requires close integration of national and international policy making and interdisciplinary research. Our future lies in learning from our failures and successes; (9) This should be the basis for the world population plan of action to be formulated in the near future.

Discriptors: *Health; Environment; Socio-economic Factors.*

Source: SP Books
Division of Spectrum Publications, Inc.
86-19 Sancho Street
Holliswood, N.Y. 11423,
U.S.A.

MAKING DECISIONS ABOUT POPULATION

Miller, Warren B., and R. Kenneth Godwin. *Psyche and demos: individual psychology and the issues of population.* New York, Oxford University Press, 1977. 332 p.

While part of the content of this book is such as is found in many other books in the population field, the three chapters entitled "The psychology of decision making and adaptation"; "Psychodemography and demopyschology"; and "Culture, institu-

tions and population psychology" contain much that is new or uncommon, and present concepts and ideas that deserve the close attention of population educators. Quality of life in its final analysis depends very much upon the quality of decision making and action on the part of persons, young and old, and as much decision making is a very relevant topic for inclusion in causes in population education.

The psychological processes involved in decision making and action are discussed lucidly and in great detail. A comprehensive decision making model, having the following components, is suggested: the motivational, attitudinal, and belief systems (M-A-B systems) of the individual decision maker; the organization of the decision maker's goal-directed behaviours in a hierarchical and sequential way; the integration of M-A-B systems and behaviour by the decision maker's ego across level of organization and across time; the progression of the decision maker through stages of pre-awareness, awareness, consideration, implementation and adaption while making a decision; and the influence on the decision maker of a variety of contextual or situational factors, such as those occurring within the family and community or at different points during the life course. Five major factors that operate to produce ineffective decision making are identified for discussion. They are: developmental limitations, learning deficits, conflict, stress, and risk-taking.

The chapter on "Psychodemography and Demopsychology" relates the earlier discussion of decision making to life cycle events affecting a) fertility e.g. decision to many, age of marriage, decision to have children or not, and when to have the first child, spacing between children, and the number of children; b) health and morbidity; c) migration; and d) mortality. The substantive psychological factors that appear to influence behaviour in these domains are discussed.

The chapter on "Culture, institutions and population psychology" discusses the influence of the cultural framework within which individual decisions have to be made. It is pointed out that the family typically exerts the greatest influence of individual population decisions. Through it, the norms and values concerning the appropriate patterns for "parenting", husband and wife relationships, and other basic roles are first introduced to the individual. The family both affects and is affected by other institutions including education, the mass media, counselling, and government. Each of these is discussed in turn, and the interdependencies are pointed out. Finally, the need for the effective promotion of environments that will encourage individuals to develop the capacity for making decisions and undertaking action that will contribute to the enhancement of quality of life is pointed out.

Descriptors: *Population Psychology; Population Policy*

Source: Oxford University Press
200 Madison Avenue
New York, N.Y. 10016,
U.S.A.

ATTITUDES AND VALUES REGARDING FERTILITY

Newman, Sidney H. and Vaida D. Thompson, eds. *Population psychology: research and educational issues.* Bethesda, Center for Population Research, National Institute of Child Health and Human Development, 1976. 234 p. (Center for Population Research monograph).

Individual attitudes and values, as well as social norms, are very much involved in fertility behaviour. Moreover, attempts to influence changes in attitudes and value have both communication and education components embedded in them. All these are issues of concern to psychologists, and their insights could assist greatly in programme development.

Population psychology is in the process of being developed as a serious study, and one of the first steps in this process is the undertaking of research. The present book attempts to delineate the progress of population psychology from its beginnings in 1969-70. It is in two parts, of which the first is entitled "Research issues and needs", and the second "Methodological and theoretical issues". Among the topics dealt with in the first part are psychological consequences of population change, family formation and marital relationships, and population communication. Under this last topics, it is stressed that most basic attitudes, values, and norms about population involve communication over long periods of time and with many persons as well as the mass media. An understanding of the dynamics underlying the communication process is therefore an essential pre-condition for success in any attempt to influence changes. Among the topics dealt with in the second part, and of special value to those engaged in population education, are birth planning values and decisions, social psychological determinants of fertility intentions, values and demographic conditions in attitudes on population policy, and the dynamics of fertility choice behaviour.

Changes in attitudes, values and social norms are relevant to quality of life in more than one way. In the first place, they are a precondition for changing many of the environmental factors with a view to enhancing quality of life. In the second place, quality of life is in the final analysis a subjective perception to a considerable extent and depends on changes in an individual's attitudes, values, and norms. A sound basis in research to ensure that attempts to change attitudes, values, and norms are informed rather than random is greatly to be sought, and the present book makes a useful contribution from this standpoint.

Descriptors: *Population Psychology; Research.*

Source: The Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
U.S.A.

PEOPLE AND VALUES

Rokeach, Milton. *The nature of human values.* New York, Free Press, 1973. 438 p.

The author suggests the following extended definitions of a value and a value system. To say that a person has a value is to say that he has an enduring prescriptive or proscriptive belief that a specific mode of behaviour or end-state of existence is preferred to an opposite mode of behaviour or end-state. This belief transcends attitudes toward objects and toward situations; it is a standard that guides and determines action, attitudes toward objects and situations, ideology, presentations of self to others, evaluations, judgments, justifications, comparisons of self with others, and attempts to influence others. Values serve adjustive, ego-defensive, knowledge, and self-actualizing functions. Instrumental and

terminal values are related yet are separately organized into relatively enduring hierarchical organizations along a continuum of importance.

From the point of view of those involved in population education, there are two chapters of special interest. The first is the chapter dealing with the measurement of values and value systems. It suggests a simple way of carrying out a value survey, using two lists of alphabetically arranged instrumental and terminal values. Each contains 18 values, and the respondent is required to rank them in the order of importance to him or her. Apart from the analysis of individual protocols, group differences can be investigated. In fact, the latter is illustrated in the chapter entitled "Values as social indicators of the quality of life in America". The responses of different population groups are interesting. For example, relatively poor socio-economic groups rank "clean" high, whereas the affluent do not. This is explained on the ground that to those living in squatter, cleanliness is a highly desired value, while the affluent living in congenial surroundings do not attach any significance to it.

A great advantage in the technique is that it is both simple and adaptable. It lends itself also for use in pre- and post-assessments in connection with educational programmes so that value changes as the result of such programmes may be ascertained.

Descriptors: *Social Values; Attitudes*

Source: Free Press
A division of Macmillan Publishing Co.
866 Third Avenue
New York, N.Y. 10022
U.S.A.

HOW MANY PEOPLE CAN WE HAVE

Singer, S. Fred, ed. *Is there an optimum level of population?* New York, McGraw-Hill, 1971. 426 p. (A Population Council book).

This book is in three parts. Part One deals with the question of an optimum population, taking into consideration natural resources and environmental factors. Part Two deals with an optimum population, taking into account education, health and welfare services. The third part, entitled "The general question of optimum: life styles and human values", deals with an area that has generally received less attention than the issues considered in the first two parts.

The present abstract focuses on the third part, which contains eight papers in all. Walter O. Roberts addresses himself to the question whether there is an optimum population level, and provides the answer that the optimum is not a particular number but that level of population at which the growth of population has ended, and society has firmly established its determination to live in harmonious balance with the environment. It is predicated on a life style and set of values that regard the enhancement of the quality of life everywhere as a worthier goal than economic growth.

Garrett Hardin makes the point that the specification of an optimum is not necessary to concede its existence. He believes that a set of optima may exist giving room for a variety of choices of life styles. On the question of economies of scale, he argues that there are diseconomies as well, and taking both these into account he suggests a figure of 50 millions as the optimum for the U.S.A. He is opposed to attempts to maximize the GNP, one reason being that

certain elements which enter into its computation (e.g. services including gambling and the cleaning up of pollution) are not real assets. He proposes an alternative statistic, which might be called the Net National Amenities (NNA). "This would measure, among other things, not only such substantive goods as food and clothing, but also such genuine goods as music, art, solitude, wilderness, beautiful scenery, fresh air, and clean water". It is not even the NNA which should be maximized, but the *per capita* share of the NNA which might be called the *Per Capita* Amenities (PCA).

John B. Calhoun argues that, from the point of view of the development of human potentiality, there is a population growth crisis, and that containing the average number of children per female to one is important in this regard. Eyra Glaser objects to the view expressed in some quarters that a population is not too large as long as it can be fed, and warns that educational services, social services, and a capability of obtaining satisfaction in personal living might break down well before the world population grew so large that it would be difficult to feed. The need to have an individual choice of life styles, and the development of an index based on a suitable value system are emphasized.

Lincoln H. Day regards it both a physical and a social necessity that population has to stop increasing some time. Furthermore, a truly optimum population would have to have negative growth rate in order that human numbers would stay in ecological balance with a steadily decreasing quantity of resources. But, what life would be like even in such as society would depend essentially on non-demographic variables. "Life could be meagre or bountiful, violent or peaceful, miserable or happy. For any particular pool of resources, the demographic conditions posited here would only make the good life more attainable; they would not, in themselves, create it. Once the parameters of optimum population are established, the good life is more a function of social attitudes and policy than of any particular demographic characteristics".

To Joseph J. Spengler, optimizing means maximizing a social welfare function, and one should ask not whether further increases in population can be accommodated but whether any net increases flow in respect of quality of life from such increases. Ultimately, the degree to which numbers are controlled and distributed optimally will depend on the life styles that are values.

Margaret Mead, while agreeing with the concept of an optimal level of population, argues that it must be stated in a way that stands a chance of acceptance. Stated in terms of an optimal ratio between adults and children, the emphasis would be on life styles and human values, and Mead believes that countries may then vie with each other in reaching the optimal level for themselves at any given moment in history.

In an overview of the contributions, Fred Singer stresses that it is important to realize that the present crisis is produced not just by people but by their consumption of resources. It is incumbent on people to learn to reduce the environmental impact of population growth by conservation of resources, re-use and recycling, a better distribution of population which reduces extreme concentrations in metropolitan centres, and above all by choosing life styles which permit "growth" of a type that makes a minimum impact on the ecology of the earth's biosphere.

Quality of life: population education

Descriptors: *Social Values; Socio-economic Factors.*

Source: McGraw-Hill Book Co.
1221 Avenue of the Americas
New York, N.Y. 10020, U.S.A.

SELF-CONTROL IN POPULATION

Singh, P.T. "Population policy: a Gandhian approach", *Social Welfare*, 20(4): 8-9, 28, July 1973.

This is a brief report of a Seminar on "Population Policy for India: A Gandhian Approach" held in India. A Gandhian approach based on Gandhian values will strike a responsive chord in Indian hearts, and from this point of view the theme of the seminar is to be commended.

The characteristics of a society based on Gandhian values would more or less be as follows: 1) Limitless personal consumption would be eschewed, and the emphasis would be on a rational limitation of needs in harmony with ecological and technological realities; 2) There would also be emphasis on the small community, embodying the values of participatory democracy, community decision-making but non-coercive personal action; 3) There would be a concern for human welfare, with special consideration for the most helpless groups in society, namely women and children.

The world *sanjama*, meaning self-controls, suggested itself as signifying a concept on the basis of which a population policy could be evolved in keeping with Gandhian values. It implied the setting of upper limits both to the striving for personal consumption and to the rate of population growth. At the micro-level, the latter consideration implied a limitation of family size and an acceptance of a small family norm, which was justifiable also in terms of the concern for the welfare of women and children.

The major instrument for awakening the masses to the value of this integrated approach was recognized as education, imparted through face to face contact as well as through the mass media. Caution was expressed that the mass media should be used educatively so that the small family norm would be one element in a package of instruction. The use of the mass media for alarmist propaganda, and for advertising contraceptives devices and methods such as sterilization was deprecated. It was important to stress the idea of equality between the sexes, so that women would not be dominated by men, and male children not preferred to female children. It was in principle desirable to raise the legal age for marriage, but it was preferred if it could be done as a participatory decision. Financial incentives and target setting for sterilization, loop insertions etc. were considered as being alien to the Gandhian approach. In the final analysis, the basis for the small family norm was not materialistic, but the contribution it could make to ideal householderhood, the equality of the sexes, and the proper care of children.

Descriptors: *Social Values; Family Size Norms; Population Policy; India.*

Source: Social Welfare
Central Social Welfare Board
Jeevan Deep, Parliament Street
New Delhi-110001, India.

POPULATION AND SOCIAL JUSTICE

U.S. National Catholic Education Association. *Seeking a just society through population education.* Proceedings of the Population Education Workshop sponsored by the Department of Elementary Schools of the National Catholic Educational Association, 15-17 December 1974. Washington D.C., 1974. 62 p.

Two articles of particular interest as reflecting the Roman Catholic point of view are "The population problem in building a just society" by Rev. J. Bryan Hehir, and "Population education as part of education for justice" by Rev. Peter J. Henriot.

Rev. Hehir points out that a primary characteristic of the world today is interdependence. The two challenges that follow from this are to develop the perspective necessary to live in an interdependent world in such a way that life is civil and humane for all, and to develop a strategy to educate for an interdependent world. In regard to two major crises confronting the world – food and energy – it would be fair to say that rapid populaton growth is part of the problem. While stressing that solutions should be directed towards other aspects of the problem as well, in particular the establishment of a new international economic order, Rev. Hehir outlines a Roman Catholic perspective on population control. The principal elements of this perspective are firstly to oppose unreservedly abortion and sterilization as means for population control, and secondly to maintain a low profile on other means of contraception. The stance against abortion and sterilization is based on fundamental human right. Few other institutions possess the access to people's lives, consciences, feelings, and beliefs the way the church has in its daily educational and pastoral work, and these means should be used to convey the stance of the Church to its members.

Rev. Henriot lists several elements that should be included in education for justice. Justice is basically a structural issue, involving the institutions, the processes and interactions of society. Education for justice should move from the anecdotal (that is, an incidence of justice or injustice) to the analytical (that is, the way things are interrelated). It should pay attention to values, and identify the values embodied in the structures, processes, institutions and interactions of society. Education for justice should also help people to analyse and modify, if necessary, their view of reality. Population education lends itself to education for justice. It is concerned with the relationships between population and development, population and the structures of development, population and consumption. Population education is also concerned with values and finally population education is concerned with the whole area of perspectives and the view of reality. Population education is very centrally a part of what those who are involved in a variety of ways with Christian education are called to focus upon.

Descriptors: *Catholicism; Family Planning; Social Justice.*

Source: National Catholic Association
1 Dupont Circle, Suite 350
Washington, D.C. 20036
U.S.A.

THAILAND: PREFERRED SEX IN CHILDREN

Vasid Prachuabmoh, and John Knodel. *Preference for sex of children in Thailand: results from the second round of a national survey*. Bangkok, Institute of Population Studies, Chulalongkorn University, 1977. 17 p. (Paper no. 23).

Studies of fertility in various parts of the world have shown that the desire among some couples to have at least one or two sons, and among others to have at least one child of each sex exerts a strong influence upon fertility behaviour and is an impediment to the practice of family planning. The present report tests these findings for Thailand.

Direct data on sex preferences was obtained from responses to questions regarding the sex and number of additionally desired children among respondents who wanted additional children, and also from responses on the sex composition of the ideal number of children. Indirect evidence of sex preferences came from cross-tabulation of both desire for additional children and current use of contraception with the sex composition of living children. The latter data indicated if sex preferences are sufficiently strong to influence fertility desires or the likelihood of practising family planning. The sample of respondents included household heads, wives of household heads, and all other ever-married under age 60 living in the selected households.

In the case of women, a moderate preference for sons coexisting with a desire to have at least one child of each sex was evident in responses concerning the sex composition of additionally desired children. Son preference was more marked among urban ethnic Chinese women than among urban ethnic Thais. Data on the sex composition of the ideal family also showed a moderate preference for sons coexisting with a desire to have at least one child of each sex. These results suggest that a focus on son preference is too narrow, and that the importance of having at least one daughter may well have a significant influence on fertility.

In contrast to the rather modest son preference expressed by women, noticeably stronger preference for sons was evident for the male respondents in both rural and urban samples. Son preference was more pronounced among the ethnic Chinese than among the ethnic Thais. Despite their son preference, men with one or two children were more likely not to want more children than women with the same number of children. The threshold at which the man wishes to stop adding children being lower than the wife's, the stronger son preference among men is perhaps unimportant as a hindrance to the use of family planning.

Descriptors: *Sex Preference; Social Values; Research; Thailand.*

Source: Institute of Population Studies
Chulalongkorn University
Bangkok 5, Thailand

Section 10: Population Education Curriculum and Instructional Materials

HOME ECONOMICS AND POPULATION

American Home Economics Association. *Handbook of home economics lessons incorporating family planning, population education, and quality of life; working draft.* Washington, D.C., 1974. 198 p.

Twenty themes are dealt with in this book, the number of lessons on each varying from one to as many as eight. Each lesson outline provides background information suggests teaching strategies and activities, class activities, follow-up activities, and also gives some test items for evaluation. Most of the themes are as relevant for boys as for girls, and in this sense the usefulness of the publication extends beyond the home economics as a school subject.

Two themes deal directly with population. One shows how decisions on family size affect the population situation of the country as well as of the world. The effects of overpopulation on individuals are highlighted, and the responsibility of both individuals and governments in controlling overpopulation is discussed. Psychosocial and economic concepts of fertility are discussed in relation to the values and costs of children. The theme of resource utilization focuses on the enhancement of quality of life, and points out how standard of living, cultural values, and productivity affect the supply of and demand for resources. The participation of women in the labour force is regarded from the point of view of its positive effects upon individual, family, and national welfare. Five themes entitled "Family functions", "Individual and family roles", "Management", "Family planning", and "Reproduction behaviour" focus on the family from a number of standpoints but with a common emphasis on individual and family welfare. The concept of decision making is discussed, and in this regard the importance of clarifying values and establishing goals is emphasized. Standard of living and the factors that affect it, including family size, are identified and discussed. A comparison is made between the needs of small families and large families for income, housing space, food, clothing and community services. Two lessons deal with the management of food resources. Housing and clothing receive their share of attention with four lessons and two lessons respectively, while health and nutrition are dealt with in great detail in 13 lessons. Two lessons are devoted to self-development. One of them emphasizes the fact that behaviour traits which contribute to positive self-development enhance quality of life for individuals. The other deals with the development of human potential, pointing out that maximizing one's potential is one way to improve quality of life.

Descriptors: *Teacher's Guide; Home Economics; Secondary Grades.*

Source: American Home Economics Association
International Family Planning Project
2010 Massachusetts Avenue, N.W.
Washington, D.C. 20036
U.S.A.

Quality of life: population education

BANGLADESH: CURRICULUM FOR POPULATION EDUCATION

Bangladesh. Ministry of Education. Population Education Programme. *Population education curriculum (classes IV-XII).* Dacca, 1979. 57 p.

In Bangladesh, population education is taught from class IV through class XII. In classes IV and V, lessons are included in the subject areas of language, mathematics, social studies, and general science; in class VI, through language, mathematics, social studies, general science, and home economics; and in classes VII to XII through language, mathematics, economics, civics, geography, general science, and home economics.

The topics included are as follows: the population situation, demography, population growth and educational facilities, population and environment, population and health, population and transportation, population growth and food, population growth and family life, population growth and standard of living, population and natural resources, migration, population growth and employment, population growth and agricultural development, and population growth and public/social welfare activities. The number of lessons devoted to each topic ranges from one for some topics (e.g. population and transportation) to over a dozen for others (e.g. population and family life). The latter is dealt with in every class from grade V through grades XI and XII. In all, the publication contains 70 lessons, each of which is divided into a specification of the subject field and topic, objectives, concepts and teaching-learning activities.

Descriptors: *Teacher's Guide; Social Studies; Science; Mathematics; Language; Home Economics; Civics; Geography; Secondary Grades; Bangladesh.*

Source: Population Education Programme
Ministry of Education
149/A Road No. 13/2
Dhanmondi R/A
Dacca-5, Bangladesh

INDIAN WORKBOOK EMPHASIZES QUALITY OF LIFE

India. National Council of Educational Research and Training. Population Education Project. *My workbook on population studies.* New Delhi, 1977. 1 vol. (various pagings).

This workbook is intended for class VIII students in Indian schools. It has an accompanying teachers' manual providing guidance to teachers in the use of the workbook.

The workbook has four units as follows: Unit I - Our fast growing population; Unit II - Growing numbers and our struggle for better living; Unit III - Population on March, environment on retriat; Unit IV - Battle to be fought in each family. The concepts contained in Units II, III and IV have been summarized in the teachers' manual as follows:

Unit II: 1. Income per head still lagging behind; 2. Very slow improvement in living conditions; 3. Much higher harvests and yet inadequate; 4. More schools, yet more illiterates; 5. Many more doctors, and yet not enough;

6. The unemployed on the increase; 7. Lack of regard for a woman, a curse; 8. Catching up with countries ahead of us.

Unit III: 1. Man, the most unique and dominant of the species; 2. Man the more consumer of food; 3. Man, the manipulator and modifier of environment; 4. Man, a short-sighted and arrogant manager; 5. Man, as a manager of renewable resources; 6. More people, more production, more pollution; 7. Pollution of affluence; 8. Pollution of poverty; 9. Living in harmony with nature; 10. Towards a new economy based on recycling of resources.

Unit IV: 1. The need for nutritious and balanced diet; 2. Clean, airy and well lit house for every family; 3. A healthy mother and happy family go together; 4. Meeting the needs of one and all; 5. Saving for the rainy day; 6. Larger families demand more from the state and society; 7. The secret of happiness and success; 8. Who have succeeded? 9. Taking care of peace.

It will be noted that the emphasis is by and large on quality of life issues, and the importance of containing family size and using environmental resources with due care as a means of achieving improvements in quality of life. Everyone of the concepts listed, as well as those on Unit I, is presented by means of a picture and a short write-up. Student responses take the form of filling in blanks in statements based upon the illustrations. It is also intended that there should be a class discussion of the various issues that arise. Additional material is available for teachers so that they could guide the discussion along fruitful lines.

Descriptors: *Textbooks and Workbooks; Secondary Grades; India.*

Source: Population on Education Project
National Council of Educational Research and Training
Sri Aurobindo Marg
New Delhi-110016
India

POPULATION GROWTH AND QUALITY OF LIFE

India. National Council of Educational Research and Training. Population Education Project. *Population education in classrooms*, ed. by N. Anantapadmanabhan and Ramesh Chandra. New Delhi, 1978. 99 p.

This book contains a unit entitled "Population and Quality of Life". The general aim of the unit is to make students realize that population growth has a direct bearing on the quality of life. The following specific objectives are listed for the unit: (1) To help the students understand the meaning of quality of life; (2) To make the students acquainted with the average levels of consumption and savings; (3) To help the students understand the physical indicators of quality of life; (4) educational facilities; (5) employment; and (6) national income. Relevant data are presented in 16 tables. Four of the tables relate the Indian data to data in other Asian countries. They present material for discussion.

Suggested student activities are: (1) The preparation by students of lists of their basic necessities and discussion of lists prepared by different groups; (2) The preparation by students of a chart showing a balanced diet; (3) The organization of an

exhibition of food items displaying their food values; (4) Visits by students to houses in their neighbourhoods and the questioning of members of households; (5) A discussion on the topic: "What can children do to improve the quality of life in their families?".

There is also a section on evaluation, containing essay type questions, short answer questions, and multiple choice questions. There are only two essay type questions, namely 1. "What do you understand by the term quality of life? What are the indicators of quality of life?" 2. It is said that population growth in India has adversely affected the quality of life? Do you agree with this statement? Explain your answer with suitable examples". Finally, there are four references given for reading by teachers.

Descriptors: *Teacher's Guide; Secondary Grades; India.*

Source: Population Education Project
National Council of Educational Research and Training
Sri Aurobindo Marg
New Delhi-110016
India

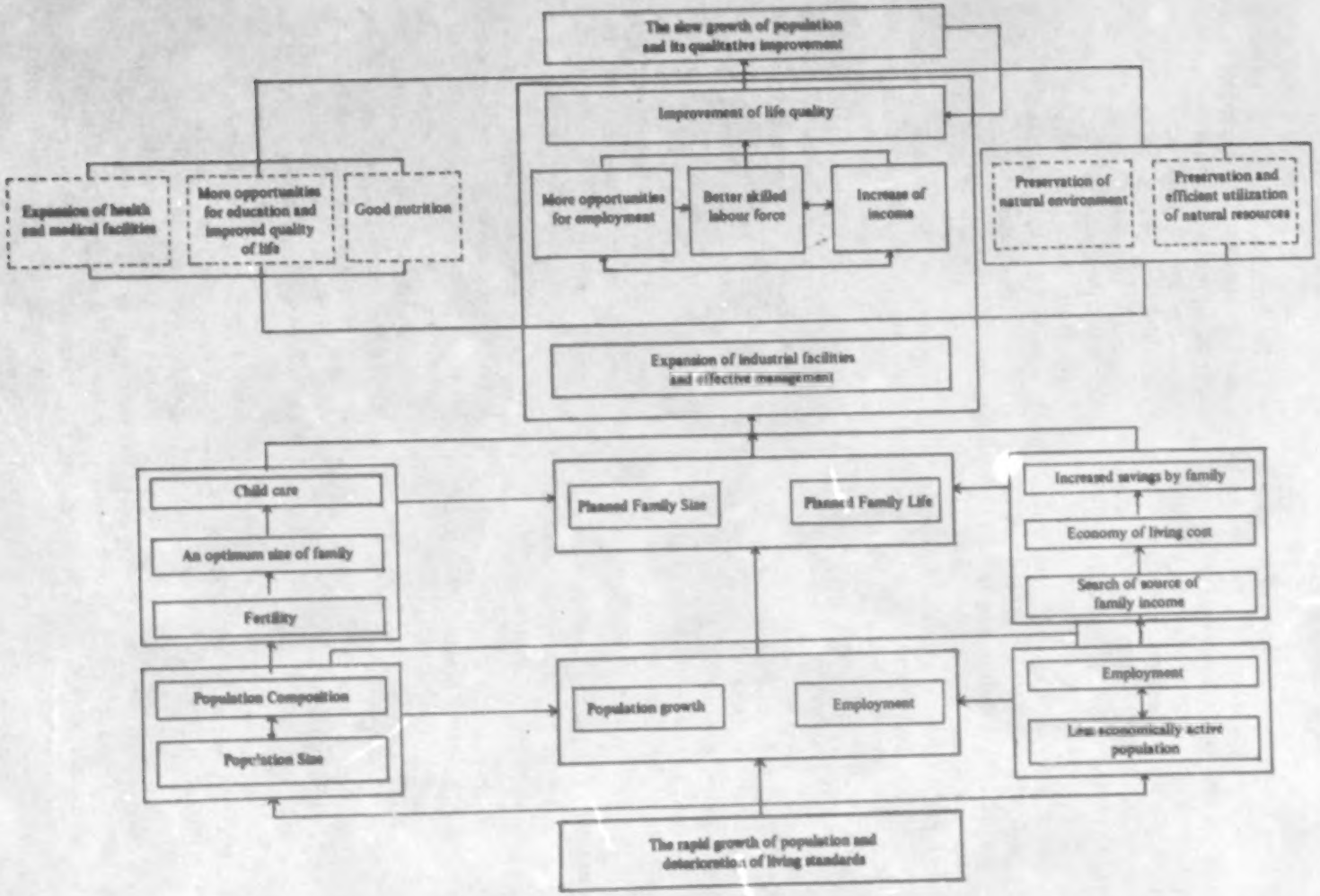
REPUBLIC OF KOREA: LEARNING UNITS

Korean Education Development Institute. *Exemplary learning units for population education.* Seoul, 1976. 170 p. (KEDI research report no. 33)

This publication contains two units of instruction, of which the first is entitled "Population Size in Korea and Betterment of Living Standard". The unit is intended for use in the Social Studies class in the fifth grade of primary schools.

The objectives of the unit are: (1) To develop an understanding that the rapid growth of population is one of the major factors which affect quality of life; (2) To develop an understanding that the improvement of life quality depends on family size and per capita income; (3) To develop an understanding that capital can be increased through the savings of one's income, which will result in the expansion of industrial facilities and employment opportunities.

The content structure of the unit is shown in the following diagram:


The slow growth of population and its qualitative improvement
Improvement of life quality
Expansion of health and medical facilities
More opportunities for education and improved quality of life
Good nutrition
More opportunities for employment
Better skilled labour force
Increase of income
Preservation of natural environment
Preservation and efficient utilization of natural resources
Expansion of industrial facilities and effective management
Child care
An optimum size of family
Fertility
Planned Family Size
Planned Family Life
Increased savings by family
Economy of living cost
Search of source of family income
Population Composition
Population Size
Population growth
Employment
Employment
Less economically active population
The rapid growth of population and deterioration of living standards

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Six class hours are to be devoted to the entire unit. For each class hour, instructional objectives are outlined and teaching/learning activities are suggested, along with the necessary aids, and reference materials for teachers. A number of test items are also given to assess student learning. The topics selected for the six class hours are (1) Population and our livings; (2) The status of population in Korea; (3) Population composition; (4) Employment trends and industry in Korea; (5) Family size and family life; (6) The slow increase of population and the betterment of economic status. Even where the wording of a topic does not convey an emphasis on quality of life (e.g. the second topic) some of the instructional objective under the second topic reads as follows: To understand that the improved standards of living lead to slow-growth of population. It can therefore be said that the overall emphasis is on quality of life, although some of the content looks peripheral at first sight.

Descriptors: *Teacher's Guide; Primary Grades; Secondary Grades; Republic of Korea.*

Source: Population Education Project
Korean Educational Development Institute
20 Umyeon-Dong San, Gangnam Gu
Seoul 134-03
Republic of Korea

MALAYSIA: SELF LEARNING IN POPULATION EDUCATION

Malaysia. Curriculum Development Centre. Population Education Project. *Population and quality of life; a self-learning module for teachers.* Kuala Lumpur, 1979. 44 p.

This module is one of a series of self-learning modules in population education specially prepared for use by teachers. Its objectives are to help teachers 1) clarify their ideas on what is meant by quality of life and to see how it is manifested both at the national and the international level; (2) list the factors that determine quality of life, and 3) explain the fact that population is an important factor in determining quality of life.

Quality of life is taken to refer to the degree of satisfaction of a number of human needs, physical as well as mental, emotional, and spiritual. After a brief introduction, four statements are presented, and the learner is expected to select the one which is considered most appropriate. The statements are as follows: 1. Quality of life is synonymous with standard of living; 2. Quality of life means an increase in income; 3. Quality of life is the balance between resources and human needs; 4. Quality of life is the degree of the satisfaction of human needs.

Having selected a response, the learner is referred to a half page which discusses the correctness or adequacy of each response. Next, five factors affecting quality of life are depicted on a diagram. These factors are: resources, process of development, standard of living, population situation, and socio-cultural factors. After a brief introduction relating to each of these, certain statement are presented and a response is required. For example, in connection with resources, the learner has to identify the least defensible of the statements; in connection with the process of development, certain factors are enumerated and the learner has to identify which of them does not lead to the process of development; in connection with socio-cultural factors, the learner has to identify

which of these – social system, political system, cultural and spiritual values, social status – has the least relevance to quality of life.

There follows after each set of statements or each set of factors, a half-page discussion relating to each one of them. This discussion highlights the salient points that follow from or are implied in the response. In other words, the discussion elaborates upon the correctness/incorrectness, adequacy/inadequacy of the response in a thought provoking manner. Finally, there is a summary of the major ideas or concepts presented in the lesson, followed by a self-assessment test and an answer key.

Descriptors: *Programmed Instruction; Teacher Training; Malaysia.*

Source: Population Education Project
Curriculum Development Centre
Ministry of Education
Pesiaran Duta
(Off Jalan Duta)
Kuala Lumpur 11-04
Malaysia

POPULATION EDUCATION IN PAKISTAN

Pakistan. National Institute of Education. *Population education.* Islamabad, 1974. 95 p.

A national workshop on population education was organized at Islamabad in February 1974 by the National Institute of Education. Ministry of Education. One of the two working groups into which the participants were divided identified outline content to be introduced at the elementary school and secondary school stages, and in adult education. Among the topics selected for inclusion in the elementary stage were air pollution, water, balanced diet, environmental sanitation, health services, and mineral resources. Among those selected for the secondary stage were problems of illiteracy and poverty, fundamental human rights and needs, food and nutrition, and migration. The three major themes suggested for adults were: quality of life in family, socio-economic consequences of population increase, and family size and acceptance of proper family size as a norm. Quality of life in family was divided into four sub-themes: 1) family life comforts; 2) family earnings and family needs; 3) family health; and 4) human physiology. In discussing family life comforts, apart from such basic necessities like food, clothing and shelter, attention was paid to interpersonal relationships and emotional needs such as mutual love and affection. Under socio-economic consequences of population increases, the impact of population growth on resources was included. The importance of balanced growth, and value of human endeavour were also among the topics that were included. The concluding section dealt with considerations that should be taken into account in arriving at a suitable family size norm.

Descriptors: *Curriculum Outline; Primary Grades; Secondary Grades; Pakistan.*

Source: National Institute of Education
Ministry of Education
Islamabad, Pakistan

PAPUA NEW GUINEA HANDBOOK

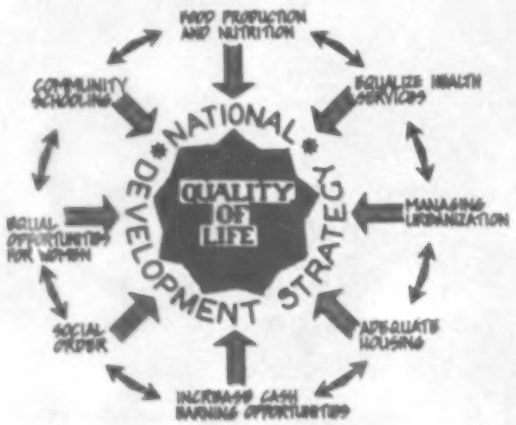
Papua New Guinea. Office of Environment and Conservation. *The effects of population on development; a handbook for extension workers.* Waigani, Office of Environment and Conservation Office of Information and National Planning Office, 1978. 50 p.

This publication, described as a handbook for extension workers, presents content which can be directly used as instructional materials for both in-school and out-of-school sectors. It is divided into four parts, entitled "Characteristics of Papua New Guinea's population", "Population problems for development planning", "Government population programme", and "Basic population data". Of these parts, the one dealing with population problems for development planning focuses on quality of life issues. In a succinct summary, it points out that rapid population growth affects 1. the percentage of the population able to contribute to national production; 2. food production and land use; 3. the provision of basic education to all school age children; 4. the improvement of health services; 5. the health standards of infants and mothers; 6. the ability of women to participate equally in development 7. urbanization and unemployment; 8. housing; and 9. social order. Additionally, urban and rural areas are considered separately. In the case of urban areas, the focus is on unemployment, shortage of housing, crime and social problems, poverty and malnutrition; in the case of rural areas, the focus is on scarcity of land for food production, malnutrition, land disputes between clans, need for new farming methods to maintain soil quality, loss of forests and soil fertility, and improving the level of services to rural people.

In the light of these problems, the following development goals are spelled out for Papua New Guinea: 1. increasing rural welfare and rural education; 2. food production and nutrition; 3. economic production and increased Papua New Guinea participation; 4. managing urbanization; 5. increasing the participation of women in all aspects of development; and 6. good social order. Attention is also paid to the problem of unemployment, two population groups being singled out for consideration. They are 1) school-leavers from grades 6, 8, 10 and 12; and 2) rural migrants to town looking for unskilled jobs. Attention is also paid to the question of family size. Traditional factors which influenced family size are shown to be no longer valid.

The publication contains several exhibits, of which is reproduced below:

THE DEVELOPMENT MERRY-GO-ROUND OR HOW TO GET ON IN LIFE



Descriptors: *Resources Materials; Pacific Countries.*

Source: Office of Environment and Conservation
Waigani, Papua New Guinea

PHILIPPINES: POPULATION GROWTH

Philippines. Ministry of Education and Culture. Population Education Program. *Consequences of population growth.* Module VIII in Population Education for Teachers. Revised edition. Manila, 1978. 32 p.

This module, which is eighth in a series of twelve self-learning modules forming a package of instructional materials on population education for the training of teachers, deals with the consequences of rapid population growth on five areas with quality of life implications. The areas are: food, economic development, education, health and the ecosystem. The section on food deals with food production and food consumption. Economic development is considered in relation to both national income and income per person. Population pressure on education is discussed with reference to enrolment ratios, current and prospective, the latter according to projections based on different patterns of fertility and mortality decline. The effects of rapid population growth on health are considered from the point of view of the availability of doctors, nurses etc. in relation to the population. The ecosystem is divided into physical factors, namely energy, water, atmospheric gases and wind, fire, gravity, topography, geological substratum, and soil; and biological factors, namely green plants, non-green plants, animals and man. The effects of rapid population growth on both physical and biological factors are pointed out. The module contains a pre-test, exercises after each topic, and a final post-test.

Descriptors: *Programmed Instruction; Teacher Training; Philippines.*

Source: Population Education Program
Ministry of Education and Culture
Arroceros Street
Manila, Philippines

HOW PEOPLE USE RESOURCES IN SRI LANKA

Sri Lanka. Curriculum Development Centre. Population Education Unit. *Man's influence on the resources and the environment; a learning unit.* Colombo, 1976. 187 p.

This learning unit, consisting of 18 lessons, has been prepared for 11 to 14 years olds in grades 6 through 9 in schools in rural agricultural communities in Sri Lanka. The objectives of the unit are to help the pupils to develop an understanding of (1) the finite nature of the vital resources on the planet; (2) the fact that with the increase in population, improvements in the standard of living, advancement of technology, and urbanization and over-crowding, (a) the use of natural resources is increasing rapidly; and (b) the environment is fast deteriorating, resulting in an adverse impact on human and other forms of life; (3) the fact that it is the duty of every person, as an individual and as a member of the community, to take all possible measures to conserve natural resources, and preserve or improve the quality of the environment.

The basic approach used in the lessons is to identify needs, the focus here being on food, consider the methods used to increase the available supply of food, and finally deal with the consequences of these actions on the environment, with a view to reducing the possibility of harmful con-

sequences and realizing the ultimate goal of enhancing quality of life.

A variety of participatory activities by pupils are suggested for each lesson, the intention being to assist pupils to arrive at conclusions themselves as the result of the activities and the discussions generated on the basis of the activities.

Descriptors: *Teacher's Guide; Secondary Grades; Sri Lanka*

Source: Population Education Project
Curriculum Development and Teacher Education Division
255 Bauddhaloka Mawatha
Colombo-7, Sri Lanka

LIFE EXPERIENCES: THAILAND

Thailand. Ministry of Education. Department of Educational Techniques. *Life experience, grades 1-6*. Bangkok, 1979. 109 p.

The Life Experience curriculum consists of 4 units for grades 1-2, 8 units for grades 3-4, and 10 units for grades 5-6. Scattered references to quality of life issues in relationship to population variables are found in the units for grades 1-2, and 3-4, but it is in the units for grades 5-6 that more explicit attention is paid to them.

Among the units for grades 5-6, there are three entitled "Family Life", "The "Environment around us" and "Population education" which pay quite explicit attention to quality of life-population interrelationships. The unit on family life considers the relationship between family size and family economy. It also considers the problems that could arise from an increase in family size, and the possible solutions in this regard. The unit on the environment stresses the need for children to understand a) their role as responsible citizens in society; b) the effects of the physical environment upon living conditions; and c) the effects of rapid population and inappropriate use of science and technology upon the environment. The unit on population education, apart from identifying and discussing the components of population change, discusses family problems, and social and economic problems, arising from large family size and rapid population growth, and goes on to deal with solutions that may be attempted at the family and the community levels.

Descriptors: *Curriculum Outline; Primary Grades; Thailand.*

Source: Curriculum Development Centre
Department of Educational Techniques
Sukhumvit Road (Planetarium Compound)
Bangkok 11, Thailand.

CURRICULUM MATERIALS FOR THE REGION

Unesco. Regional Office for Education in Asia and Oceania. *A collection of curriculum materials, booklet 1: Syllabi and course content outlines integrating population into non-form. development programes.* Bangkok, 1980. 71 p. (Population Education Programme Service)

This collection of instructional materials has a few that specifically make reference to quality of life. One of them, entitled "Rapid population growth in relation

to quality of life, decision-making and sex education" is taken from the report of a national seminar-workshop held in the Philippines in December 1974 on out-of-school/noon-formal population education The following quality of life issues are considered: health, food production, environment and its protection, husband-wife relationships, parent-child relationships and sex education. In regard to health, the advantages of a small family, with children not too closely spaced, are stressed from the point of view of both mothers and children. The effects of rapid population growth on the quantity and quality of food, and the incidence of malnutrition are also pointed out. The importance of planning and decision-making co-operatively, with due regard to inter-personal relationships and the welfare of every member of the family, is emphasized. A rational and responsible attitude to sex, and the ethical and moral values involved in sex behaviour, are also given due attention. Although, the emphasis is on the encouragement of a small family norm as leading to improvement of quality of life of the individual, the family, and the nation.

Three topics in a sample syllabus of population education as a component of home management for home management technicians, excerpted from the report of a FAO/UNFPA workshop on the curricula of rural development institutions in Asia and the Far East (Los Banos, 1975) deal specifically with quality of life. One topic enumerates indicators of quality of life, but are also affected in turn by quality of life. The second topic relates quality of life to family income and family size, and shows how a smaller family enables the attainment of a better quality of life, for a given income. The third topic relates family size and composition to basic human needs and productivity.

Apart from the direct mention of quality of life in the two reports referred to, other issues raised in these two reports, as well as a number of issues raised in other reports from which excerpts have been included, relate indirectly but nonetheless significantly to quality of life.

Descriptors. *Curriculum Outline; Out-of-School Programmes, Asia.*

Source: Unesco Regional Office for Education in Asia and the Pacific
Population Education Clearing House
P.O. Box 1425, Bangkok, G.P.O.
Bangkok, Thailand.